

X. *On the Geodephagous Coleoptera of Japan.*

By H. W. BATES, F.L.S.

[Read 17th February, 1873.]

THE following enumeration and description of the *Cicindelidæ* and *Carabidæ* of Japan are founded chiefly on the magnificent collection made by Mr. George Lewis during a five years' residence in that country, chiefly at Nagasaki, in the island of Kushiin, and at Hiogo and Osaka in the main island of Nipon. Although these two families had already received much attention, chiefly from Russian travellers and residents, and a large number had been described by Morawitz, Motschulsky, and others; Mr. Lewis has more than trebled the number of known species from this country, and added 120 new species to science.

The total number now known is 244 species, comprised in 84 genera, a number that will no doubt be yet considerably increased, as the British Islands, lying in a much more northerly latitude, contain many more, viz., 311 species. It is not very probable, however, that future discoveries will alter materially the general character of the Fauna of Japan in this department; for, although the larger portion of the island of Nipon to the north and east is as yet unworked; collections have been received from many distant points on all the islands, and they show a tolerable uniformity in their productions. We may consider, therefore, that we have now material sufficient to afford a fair idea of the relations of the Coleopterous Fauna of Japan with that of other countries whose productions are equally well known; and the *Geodephaga* may be taken as very good representatives of all the *Coleoptera* for this purpose.

The first stage in the inquiry is the most difficult, viz., how far is the Fauna of Japan endemic or peculiar? the difficulty arising from our ignorance of the productions of that part of the Asiatic continent which lies nearest to the islands, viz., Korea. The straits between the larger islands of Japan and Korea are partly bridged over by smaller islands, so that the widest space of sea to be

traversed in passing from the one to the other does not exceed thirty miles, or a little wider than the Straits of Dover. Moreover, the sea is shallow, the maximum depth being about 70 fathoms, so that an elevation of say 500 feet,—which may well have taken place during the lifetime of existing species,—would convert the Archipelago into a peninsula of Asia. The islands, therefore, are not geographically oceanic, and we can scarcely expect a great degree of endemicity, such as is found in the Canaries, Madagascar, and other oceanic or suboceanic islands whose Fauna is not wholly modern and derivative. However, the number of Geodephagous genera peculiar to Japan, including that strangest of all, *Damaster*, is no less than nine,—a large proportion out of eighty-four. I am inclined to think that this proportion will not be very much reduced by future discoveries; although Korea is unknown, we are tolerably well acquainted with the Geodephagous Fauna of the Amur a little farther north, and with that of the coast region of the temperate zone of China to the east, where also Mr. Lewis made a most interesting collection; *Carabidae*, moreover, have been collected to some extent in the coast country of Manchuria, adjoining Korea, and in the island of Saghalien, which almost connects the north of Japan with the north-eastern mainland of Asia.

Next, as to the relations of the Japanese Fauna with that of the great Northern or Palaearctic Fauna of Europe and Asia. Russian Entomologists, who have worked assiduously at the Coleopterous Fauna of Siberia, have repeatedly noticed its uniformity with that of Europe,—even Western Europe,—the similarity decreasing pretty regularly, but, according to them, not very considerably in proceeding from west to east. They have also remarked on the essential identity of the Japanese with this great Palaearctic Fauna. Mr. Lewis himself, as he informs me, was much struck with the similarity of Japanese *Coleoptera* with those of Great Britain. Let us see how far these views are confirmed by close examination of the distribution of the genera of *Geodephaga*. With regard to species, the number common to Japan and Western Europe is very limited.

A fair comparison between Japan and Western Europe cannot well be made, for there is no tract of land in the West analogous to Japan in geographical position. Great Britain is not at all a close analogy, as the whole of it lies far to the north of the latitude of the Japanese Archipelago,

which is included between the parallels of  $31^{\circ}$  and  $44^{\circ}$  north. A tract of land measured off in Western Europe in the same latitudes would have its northern extremity at Bordeaux and its southern at the Atlas Mountains. However, as the climate of the eastern side of northern continents is colder than that of the western side, and the Isotherm of  $50^{\circ}$  passing through the centre of England and the north of Nipon, it would be fair to give the European term of the comparison a more northerly extension, and compare Japan with a western area extending, say from the South of England to Tangier.

The number of genera of *Geodephaga* found in this part of Western Europe is ninety-six; the number common to Western Europe and Japan only forty-four, nearly all of which are universally distributed, or at least over the temperate zones of the earth. There are no fewer than fifty-two (or more than one half,) West European genera of *Carabidæ* unknown to Japan, and vice versâ, thirty-eight Japanese genera are unknown to Western Europe. I think this is conclusive that there is no identity between the two Faunas, and that their origin is, therefore, not to be explained by the same set of causes.

There is a rather closer connection between the Japanese Geodephagous Fauna and that of Eastern Siberia; but there is an equally close, perhaps closer connection between it and the Fauna of Eastern tropical Asia. Of the eighty-four Japanese genera, twenty-one are elsewhere found only between the tropics, chiefly in Asia. It is striking to find in Japan some of the most curious Geodephagous genera of Birmah and India, such as *Eustra*, *Bothynoptera*, *Crossoglossa*, *Dicranoneus*, and others, which have not yet been found even in China. Other tropical genera also represented in Japan are *Colpodes*, *Drimostoma*, *Trigonotoma*, *Triplogenius*, *Calleida*. On the other hand, the more boreal of the European genera extending throughout Siberia, and some of them through North America, are absent from Japan, such as *Notiophilus*, *Elaphrus*, *Blethisa*, *Pelophila*, *Leistus*, *Loricera*, *Miscodera*, *Stomis*, and many others. The most characteristic genera inhabiting Western Europe in similar latitudes to Japan are also wholly absent, such as *Siagona*, *Broscus*, *Licinus*, *Aristus*, *Ditomus*, *Carterus*, *Acinopus*, *Ophonus*, *Olisthopus*, *Molops*, *Pogonus*, and others.

Professor Asa Gray, the eminent botanist, announced many years ago in a treatise on the Japanese Flora, that

there was a distinct affinity between the Flora of Japan and that of the Atlantic States of North America, *i. e.*, genera are found in these two regions which do not exist elsewhere. I have naturally been curious to ascertain whether the Geodephagous *Coleoptera* showed any trace of this curious connection, and am able to say that there is an unmistakable trace. It is in the well-marked genus *Lachnocrepis*, allied to *Oödes*, of which I here describe a species, and which is at present known from no other part of the world than the South-Eastern States of North America and Japan. There is no similar connection between Japan and the Western side of N. America, or the Western side of Europe. There are traces of similarity too in the genus *Pristodactyla*, allied species being found in Japan and in Eastern North America. I am inclined to attribute this singular relationship of Faunas by the migration of Northern types from their Miocene homes in the arctic circle on the advent of the glacial epoch. The species would migrate along different meridians towards the South, and such as were adapted to the extreme climates of the Eastern sides of both the great continents would finally settle there, or at least that remnant of them that escaped extinction.

### LIST OF SPECIES.

<p>Family CICINDELIDÆ.</p> <p><i>Cicindela</i> <i>Chinensis</i>, DeGeer.  <i>Japonica</i>, Guér.  <i>Japanensis</i>, Chaud.  <i>Lewisii</i>, n. sp.  <i>latescripta</i>, Motsch.  <i>Amurensis</i>, Moraw.  <i>speculifera</i>, Chev.  <i>gracilis</i>, Pallas.</p>	<p><i>Carabus</i> <i>Albrechti</i>, Moraw.  <i>procerulus</i>, Chaud.  <i>granulatus</i>, L.  <i>tuberculatus</i>, Fisch.  <i>Calosoma</i> <i>Maximowiczi</i>, Moraw.  <i>mikado</i>, n. sp.  <i>Nebria</i> <i>livida</i>, L.  <i>macrogonia</i>, n. sp.  <i>puleherrima</i>, n. sp.  <i>Chinensis</i>, Bates.</p>
<p>Family CARABIDÆ.</p> <p>Subfam. OMOPHRONINÆ.</p> <p><i>Omophron</i> <i>æqualis</i>, Moraw.</p> <p>Subfam. CARABINÆ.</p> <p><i>Cyclrus</i> <i>convexus</i>, Moraw.  <i>Danaster</i> <i>blaptoides</i>, Kollar.  <i>Lewisii</i>, Rye.  <i>Fortunei</i>, Adams.  <i>pandurus</i>, n. s.  <i>rugipennis</i>, Motsch.  <i>Carabus</i> <i>DeHaanii</i>, Chaud.  <i>Yacoinus</i>, n. sp.  <i>insulicola</i>, Chaud.  <i>Maiyasanus</i>, n. sp.</p>	<p>Subfam. OZÆNINÆ.</p> <p><i>Enstra</i> <i>plagiata</i>, Schmidt-Göebel.</p> <p>Subfam. SCARITINÆ.</p> <p><i>Scarites</i> <i>aterrimus</i>, Moraw.  <i>pacificus</i>, n. sp.  <i>Clivina</i> <i>lata</i>, Putz.  <i>humilis</i>, Moraw.  <i>Niponeusis</i>, n. sp.  <i>Dyschirius</i> <i>cheloscelsis</i>, n. sp.  <i>Steno</i>, n. sp.  <i>ordinatus</i>, n. sp.  <i>orientalis</i>, Putz.  <i>Hiogoensis</i>, n. sp.</p>



*Dyschirius daimiellus*, n. sp.  
*sphaerulifer*, n. sp.

Subfam. BROSCINÆ.

*Craspedonotus tibialis*, Schaum.

Subfam. PANAGÆINÆ.

*Eudema flavopilosum*, Chaud.  
*Dischissus* (n. g.) *mirandus*, n. sp.  
     *quadrinotatus*, Motsch.  
*Peronomerus nigrinus*, n. sp.  
*Panagæus Japonicus*, Chaud.  
     *singularis*, n. sp.  
     *robustus*, Moraw.

Subfam. CHLÆNIINÆ.

*Callistomimus modestus*, Schaum.  
*Chlœnius næviger*, Moraw.  
     *hospes*, Moraw.  
     *pictus*, Chaud.  
     *abstersus*, n. sp.  
     *aspericollis*, n. sp.  
     *subhamatus*, Chaud.  
     *deliculus*, n. sp.  
     *pericallus*, Redtenb.  
     *spoliatus*, Rossi.  
     *xanthopleurus*, Chaud.  
     *circumductus*, Moraw.  
     *callichloris*, n. sp.  
     *inops*, Chaud.  
     *culminatus*, n. sp.  
     *Noguchii*, n. sp.  
     *varicornis*, Moraw.  
     *ocreatus*, n. sp.  
     *pallipes*, Gebler.  
     *præfectus*, n. sp.  
     *costiger*, Chaud.

Subfam. OÖDIDINÆ.

*Oödes vicarius*, n. sp.  
     *prolixus*, n. sp.  
     *vilis*, Chaud.  
*Lachnocrepis Japonicus*, n. sp.

Subfam. LICININÆ.

*Rembus opacus*, Chaud.  
     *gigas*, n. sp.  
     *elongatus*, n. sp.  
*Badister pictus*, n. sp.  
     *nigriceps*, Moraw.  
     *vittatus*, n. sp.  
     *marginellus*, n. sp.

Subfam. ANISODACTYLINÆ.

*Anisodactylus signatus*, Illig.  
     *punctatipennis*, Moraw.  
     *tricuspidatus*, Moraw.  
*Dichirotrichus tenuimanus*, n. sp.

Subfam. HARPALINÆ.

*Harpalus capito*, Moraw.  
     *ruficornis*, F.  
     *griseus*, Panz.  
     *roninus*, n. sp.  
     *tridens*, Moraw.  
     *lævicollis*, Dufts.  
     *Japonicus*, Moraw.  
     *argutoroides*, n. sp.  
     *platynotus*, n. sp.  
     *chalcentus*, n. sp.  
     *tinctulus*, n. sp.  
     *relucens*, n. sp.  
     *rubefactus*, n. sp.  
     *discrepans*, Moraw.  
     *fuliginosus*, Dufts.  
     *zabroides*, Dej.  
     *lucidus*, Moraw.  
*Tachycellus anchomenoides*, n. sp.  
     *grandiceps*, n. sp.  
*Bradycellus læticolor*, n. sp.  
     *finbriatus*, n. sp.  
*Trichotichnus longitarsis*, Moraw.  
*Acupalpus inornatus*, n. sp.  
*Anoplogenus circumcinctus*, Motsch.  
*Stenolophus propinquus*, Moraw.  
     *castaneipennis*, n. sp.  
     *proximus*, Dej.  
     *chalcens*, n. sp.  
     *quinque-pustulatus*, Wiedm.  
*Platymetopus corrosus*, n. sp.

Subfam. ANCHOMENINÆ.

*Pristonychus æneolus*, n. sp.  
*Dolichus flavicornis*, F.  
     *callitheres*, n. sp.  
*Crepidactyla nitida*, Motsch.  
*Pristodactyla cyclodera*, n. sp.  
     *dulcigrada*, n. sp.  
     *arenaticollis*, Motsch.  
*Taphria congrua*, Moraw.  
     *crassipalpis*, n. sp.  
*Colpodes atricomes*, n. sp.  
     *splendens*, Moraw.  
     *lampus*, n. sp.  
     *modestior*, n. sp.  
     *sylphis*, n. sp.  
     *Japonicus*, Moraw.  
*Dicranoncus femoralis*, Chaud.  
*Anchomenus protensus*, Moraw.  
     *magnus*, n. sp.  
     *leucopus*, n. sp.  
     *daimio*, n. sp.  
     *chalcomus*, n. sp.  
     *impressus*, Panz.  
     *quadrupunctatus*,  
         DeGeer.  
*Orthotrichus cymindoides*, Dej.

Subfam. TRECHICHINÆ.  
*Trechichus Japonicus*, n. sp.  
*Pentoplogenus exiguus*, Moraw.

Subfam. ABACETINÆ.  
*Abacetus leucotelus*, n. sp.

Subfam. DRIMOSTOMINÆ.  
*Stomonaxus striaticollis*, Dej.  
*platynotus*, n. sp.

Subfam. TRIGONOTOMINÆ.  
*Trigonotoma Lewisii*, n. sp.  
*Triplogenus ingens*, Moraw.  
*euprescens*, Motsch.

Subfam. PTEROSTICHINÆ.  
*Pœcilus planicollis*, Motsch.  
*lepidus*, Moraw.  
*Pterostichus sulcitaris*, Moraw.  
*microcephalus*, Motsch.  
*procephalus*, n. sp.  
*subæneus*, Motsch.  
*neglectus*, Moraw.  
*longinquus*, n. sp.  
*prolongatus*, Moraw.  
*Noguchii*, n. sp.  
*fortis*, Moraw.  
*rotundangulus*, Moraw.  
*thorectes*, n. sp.  
*Japonicus*, Motsch.  
*subovatus*, Motsch.  
*orientalis*, Motsch.  
*tropidurus*, n. sp.  
*Thunbergi*, Moraw.  
*sphodriiformis*, n. sp.  
*Yoritomus*, n. sp.  
*Curtonotus gigantens*, Motsch.  
*nitens*, Putz.  
*Hiogoensis*, n. sp.  
*Bradytus ampliatus*, n. sp.  
*simplicidens*, Moraw.  
*Amara chalcophæa*, n. sp.  
*laticarpus*, n. sp.  
*chalcites*, Zimm.  
*obscuripes*, n. sp.

Subfam. PATROBINÆ.  
*Patrobus flavipes*, Motsch.  
*Diplois caligatus*, n. sp.

Subfam. TRECHINÆ.  
*Trechus postilenatus*, n. sp.  
*ephippiatus*, n. sp.  
*Perileptus Japonicus*, n. sp.

Subfam. BEMBIDIINÆ.  
*Tachys exaratus*, n. sp.  
*palleseens*, n. sp.  
*sericans*, n. sp.

*Tachys triangularis*, Nietn.  
*lætificus*, n. sp.  
*fuscicauda*, n. sp.  
*perlutus*, n. sp.  
*Tachyta microscopica*, n. sp.  
*Tachypus semilucidus*, Motsch.  
*Bembidium stenoderum*, n. sp.  
*niloticum*, Dej.  
*cognatum*, Moraw.  
*lunatum*, Dufts.  
*consummatum*, n. sp.  
*Hiogoense*, n. sp.  
*lissonotum*, n. sp.

Subfam. ODACANTHINÆ.  
*Ophionea cyanocephala*, F.  
*Casnonia flavicauda*, n. sp.

Subfam. GALERITINÆ.  
*Drypta lineola*, Dej.  
*Galerita Japonica*, n. sp.  
*Planetes bimaculatus*, Macleay.

Subfam. BRACHININÆ.  
*Pheropsophus Jessoensis*, Moraw.  
*Brachinus scotomedes*, Redtenb.  
*stenoderus*, n. sp.  
*incomptus*, n. sp.  
*Lewisii*, n. sp.  
*Crepidogaster bicolor*, Bohem.

Subfam. MASOREINÆ.  
*Masorcus adelioïdes*, Macleay.

Subfam. DROMIINÆ.  
*Dromius quadraticollis*, Moraw.  
*optimus*, n. sp.  
*Apristus striatus*, Motsch.  
*rufiscapis*, n. sp.  
*secticollis*, n. sp.  
*euprascens*, n. sp.

Subfam. CYMINDINÆ.  
*Cymindis pictula*, n. sp.  
*rivularis*, Motsch.  
*daimio*, n. sp.

Subfam. CALLEIDINÆ.  
*Endynomena Lewisii*, n. sp.  
*Paraphæa* (n. g.) *signifera*, n. sp.  
*Bothynoptera perforata*, n. sp.  
*tripunctata*, n. sp.  
*Taiconia* (n. g.) *aurata*, n. sp.  
*Crossoglossa latecincta*, n. sp.  
*monostigma*, n. sp.  
*cavipennis*, n. sp.  
*lesipennis*, n. sp.  
*Calleida lepida*, Redtenb.  
*onoha*, n. sp.

## Subfam. GALERUCIDIINÆ.

*Lebidia octoguttata*, Moraw.  
*bioculata*, Moraw.

## Subfam. LEBIINÆ.

*Dictya cribricollis*, Moraw.  
*Lebia Japonica*, Chaud.  
*fusca*, Moraw.  
*Idæ*, n. sp.  
*sandaligera*, n. sp.  
*bifenestrata*, Moraw.

*Lebia comitata*, n. sp.  
*crux-minor*, L.

## Subfam. PENTAGONICINÆ.

*Pentagonica ruficollis*, Schmidt-  
 Goebel.  
*nigripennis*, n. sp.  
*subcordicollis*, n. sp.

## Subfam. COPTODERINÆ.

*Amphimenes* (n. g.) *piceolus*, n. sp.

## Fam. CICINDELIDÆ.

*Cicindela Chinensis*, DeGeer, Ins. 4, t. 17, f. 23; Olivier, Entom. 33, p. 9, pl. 2, f. 20.

*Japonica*, Thunb. Nov. Sp. Ins. Diss. i. p. 25, t. 1, f. 39.

This handsome and well-known *Cicindela*, according to Mr. Lewis's notes, is abundant everywhere in Japan; frequenting the neighbourhood of water, especially running streams, March to November. It is common also in China, from Hong Kong to the Yang-tsze. I have seen it stated that the Japanese specimens form a variety, distinct from the Chinese; this may be true as regards those found at Hong Kong, which are bluer in colour, and have less of the coppery tinge on the thorax and the base and apex of the elytra; but specimens from Ningpo do not differ in these respects from those of Nagasaki.

*Cicindela Japonica*, Guérin-Méneville, Revue Zool., 1847, p. 2.

*Japana*, Motschulsky, Etudes Entom., 1857, p. 108.

*æneo-opaca*, id. l. c., 1860, p. 5.

Also a well-known species, somewhat resembling the European *C. sylvatica* (which extends its range into Eastern Siberia), but differing greatly in the shape and colour of the labrum, which is white, and scarcely produced in the middle.

Found in the dry season (February to June) abundantly on hill sides and in woods, everywhere.

*C. Japanensis*, Chaudoir, Bulletin d. l. Soc. Imp. des Naturalistes de Moscou, 1863, p. 2.

Considered by Chaudoir to be a local variety of the common European *C. hybrida*, and defined in these terms:—

“Inter minores, colore cum typo convenit, suprà

tamen paulo obscurior, lunulâ humerali late interruptâ, fasciâ mediâ minime marginatâ, longius descendente, obliquâ, medio attenuatâ, lunulâ apicali tenui."

The reason which induces Baron Chaudoir to consider the Japanese insect as a local form of the widely-spread *C. hybrida* is apparently the existence of a numerous series of connecting varieties, found throughout the Northern Hemisphere of the old world along temperate latitudes between Japan and Western Europe. Otherwise, the well-marked and constant differences offered by *C. Japanensis* would probably have led him to consider it a distinct species, and as such I prefer to treat it. It is always smaller than *C. hybrida* (5 to  $5\frac{1}{2}$  lines), and of an olive-green colour, with silky cupreous reflections, and with the sides of the breast, and a broad ring round the femora and tibiæ, brilliant coppery. The thorax has similar straight sides, but it is more distinctly narrowed behind. The elytra in the ♀ have each, near the suture, and at a short distance from the base, a rounded dusky depression, which I do not see in *C. hybrida*, or any of its varieties that I have examined. The white belts and spots of the elytra are, in all Mr. Lewis's specimens, as described by Baron Chaudoir, viz., the humeral lunule is separated into two distant spots, the submedian fascia is oblique and rather narrow, without dentiform projections or thickened portions, and the apical lunule is very slender in the middle.

Very abundant in the sandy beds of rivers at Osaka and Kobé.

*C. Lewisii*, n. sp.

Valde elongata, fusco-nigra leviter cuprascens, infrà et pedibus cyaneis, pectoris lateribus aureo-cupreis, cinereo-villosis; elytris subtilissime granulatis, lunulis humerali et apicali, fasciâque medianâ transversali flexuosâ, albis; labro brevissimo, medio haud producto, albo.

Long.  $7-7\frac{1}{2}$  lin. ♂ ♀.

The form of the white marks of the elytra in this species is exactly as in the typical form of *C. hybrida*; the shape of the head is also very similar, the eyes being only moderately prominent and the forehead very little depressed. But there the similarity ceases. The labrum in *C. Lewisii* is, in both sexes, remarkably short and broad, with nearly straight anterior edge (subdenticulate in ♀), and much rounded angles. The elytra are greatly elongated, with

nearly parallel sides; the sutural apex spinose in both sexes; they are opaque, but rather closely studded with glossy elevated granules, much more minute than those of *C. hybrida* and allied species. The great length of the elytra makes the head and thorax appear relatively short. The maxillary palpi are reddish, with the second joint partly, and the third and fourth wholly, brassy green. The labial palpi are pale testaceous, with the terminal joint only brassy green.

On sandy sea-beach, Sakai, near Osaka.

*C. lætescripta*, Motschulsky, in Schrenk's Reise im Amurlande, Ins. p. 88, tab. vi. f. 1.

Valde elongata, cyaneo-nigra, elytris elongato-ellipticis, margine lato (lunulis et fasciâ obliquâ medianâ conjunctis) lineolisque duabus suturalibus albis; capite parvo, thorace cylindrico-ovato, pedibus valde elongatis.

Long. 7—8 lin. ♂ ♀.

Motschulsky gives five lines only as the length of this species, but as his measurements are very frequently erroneous, and his figure accurately represents the present insect in size and markings, I feel no doubt that the determination is correct, especially if we may assume a little inaccuracy in the figure as to the rounding of the shoulders of the elytra, which in our insect are very distinct, and even produced a little forward. The tibiæ, and even the tarsi in some specimens, are more or less rufous. The white hairs of the flanks of the body beneath are adpressed or subtomentose, as in *C. signata* and other long-legged species, between which and the *cancellata* group this remarkable and elegant species must be placed.

Mr. Lewis found it in the sandy beds of rivers near Kawachi. Motschulsky records it as having been taken at various places along the banks of the Amur and Usuri by MM. Schrenk and Ditmar, and Madame Gachkevich, and also at Dolé and Kidsi. His correspondents, however, did not meet with it in Japan.

*C. Amurensis*, Morawitz, Bulletin de l'Acad. Imp. des Sciences de St. Petersburg, 1863, p. 238.

*C. Elisæ*, Motsch. Bull. Moscou, 1859, ii. p. 487?

“Viridi-ænea, subtus lateribus albo-villosa, capite inter antennis profundius striolato, prothorace longiusculo, tere-

tiusculo, lateribus hirsuto; elytris punctatis, lunulâ humerali apicalique dentatis fasciâque ante medium bilunatâ tenuibus, albis.

Long.  $8\frac{1}{2}$ — $9\frac{1}{2}$  millim.

♂ Elytris oblique truncatis, angulo suturali prominulo.

♀ Elytris oblique truncatis, apiceque rotundatis."

(Moraw.)

As Morawitz rightly observes, this species belongs to the same group as *C. trisignata* of Europe. In fact, it differs no more from *C. trisignata* than *C. Japanensis* does from *C. hybrida*. It is a little smaller and less coppery in colour, and the white markings of the elytra are narrower, and more sharply limited.

Osaka; sandy places in August. Mr. Lewis also captured the species abundantly on the shores of lakes at Kiu-Kiang, on the Yang-tsze, in China; and I have a specimen taken by Mr. Arthur Adams, on the coast of Manchuria. According to Morawitz, it was met with by Maack and Radde on the Amur and Usuri rivers.

*C. Elisæ* of Motschulsky may, perhaps, belong to the same species; but if so, he has given not merely an insufficient but a false description, so that his name cannot be adopted.

*C. speculifera*, Chevrolat, Revue Zool., 1845, p. 97.

Named from the small, mirror-like spot on the anterior part of the disk of each elytron in the ♀; a character in which it agrees with numerous other species more or less closely allied to it. Japanese specimens do not differ in the slightest from those of Hong Kong. In size they vary from six to seven lines in length, which is much larger than the Indian species *C. undulata*, Dej. ( $4\frac{1}{2}$  lines), with which it is united in Gemminger and Harold's Catalogue.

It is found in Japan only during the summer rains in August, in moist paddy-fields and on roads. Hiogo, Nagasaki.

*C. gracilis*, Pallas, It. ii., p. 724; Dej. Sp. Gen. i. 139.

Of this well-known Siberian species, allied to the European *C. germanica*, Mr. Lewis obtained only one specimen, at Ipongi, near Nagasaki, in August.



## Fam. CARABIDÆ.

Division I. *Epimera mesothoracica coxas attingentia*.

Subfam. OMOPHONINÆ.

*Omóphron æqualis*, Morawitz, Beitrag zur Käferfauna der Ins. Jesso, p. 6.

Hiogo; in a sandy river bed. An examination of five specimens taken by Mr. Lewis shows that the characters relied on by Morawitz to distinguish this species from the European *O. limbatus* are not constant. Thus the fourteenth and fifteenth elytral striae are sometimes confluent long before the apex, as is generally seen in *O. limbatus*, and the twelfth stria is abbreviated only in one example. I find, however, *O. limbatus* varies in these points. The only differences between the two forms that I observe are size (*O. æqualis* being  $3\frac{1}{3}$  lines long) and the distinctly straighter lateral margins of the thorax in *O. æqualis*, with much more produced and less deflexed anterior angles.

Subfam. CARABINÆ.

*Cychrus convexus*, Moraw. Beitr. z. Käferf. Ins. Jesso, p. 7, t. 1, f. 2.

Hakodadi. Mr. Lewis did not obtain this species, which is described by Morawitz as very distinct in its very convex elytra, with lateral keel visible from above only at the shoulders. Its colour is brassy black, with cordate thorax and strongly granulated, triseriate-tuberculate elytra;  $15\frac{1}{2}$  millimetres long.

*Damaster blaptoïdes*, Kollar, Ann. Wien. Mus. i. 1836, p. 334, t. 31, f. 1; Lacordaire, Genera des Col. Atlas, t. 2, f. 2.

The famous *Damaster blaptoïdes* was met with by Mr. Lewis only in "deep peaty woods, in the granitic district," near Nagasaki. All specimens of *Damaster* found elsewhere in Japan differ more or less from this, which is the largest form. The size of the specimens brought home varies from 1 in. 8 lines to 2 in. 5 lines (including the elytral mucro). Besides the larger average size, this species is distinguished from the allied forms by the much longer elytral mucro, which in some males measures a quarter of an inch in length.

*D. Lewisii*, Rye, Entom. Monthly Mag. Novem. 1872, p. 131.

“*D. blaptoïdi* proxime affinis; staturâ minore, pedibus comparatim brevioribus, thoracis lineâ lævi medianâ longitudinali nullâ vel obsoletâ, elytrorum apicibus multo minus productis, discedens.” Rye, l. c.

Found at Simabara, I. Kushiin, and Hiogo, in Nipon; both sandy districts.

The differences between this form and *D. blaptoïdes* are very slight, and I scarcely recognize in Mr. Lewis's specimens the distinguishing characters drawn by Mr. Rye from the longitudinal line of the thorax and the legs. The Japanese themselves, however, distinguish the two forms, and when a long series of specimens of each are compared, the smaller size, more slender figure and shorter mucro of *D. Lewisii* are sufficiently conspicuous. In size it varies from 1 in. 6 lin. to 1 in. 8 lin.

*D. Fortunei*, A. Adams, Ann. & Mag. Nat. Hist. 1861, p. 59.

Island of Awa-Sima, off the N. E. Coast of Nipon.

Distinguished from the *D. Fortunei* described by Schaum, by the coppery colour of the head and thorax, the latter of which is more strongly transverse-rugose. I have examined both sexes and find the differences constant.

Mr. Adams has recently informed Mr. Lewis that it was on Tabu-Sima that he collected his specimens of this insect. The difference of locality is not very material, as the two islands are on the same coast, not many miles distant from each other.

*D. pandurus*, n. sp.

*D. Fortunei*, Schaum, Ann. Soc. Ent. Fr. 1862, p. 68, t. 2, f. 1.

Yokohama.

This species has been received in great abundance from Yokohama and the S. E. part of Nipon. In a large series which I have had an opportunity of inspecting the deep blue-black colour of the whole upper surface is constant. Mr. Lewis never met with it in the Island of Kushiin, which is the head-quarters of *D. blaptoïdes*. It is at once distinguished by its shorter thorax, dilated in the middle, and short, sometimes scarcely prominent elytral mucrones.

*D. rugipennis*, Motsch. Etud. Entom. x. p. 6.

*D. auricollis*, C. Waterhouse, Trans. Ent. Soc. Ser. 3, vol. 5, p. 569.

*Carabus* (*Coptolabrus*) *rugipennis*, Morawitz, Beitr. etc., p. 8, t. 1, f. 3.

Hakodadi. Not in Mr. Lewis's collection. The facies and shape of this elegant species are those of *Damaster*, but the dilated tarsi of the ♂ connect it with *Carabus*, especially with the *Coptolabrus* group. The degree of dilatation, however, is very slight, very different to what exists in *Coptolabrus*.

*Carabus DeHaanii*, Chaudoir, Bull. Mosc. 1848, iv. p. 452.

Among the numerous described species from Japan and North China belonging to the *C. prodigus* group, the present is distinguished by its large size (15 to 18 lines), blueish-black colour, impunctate striae of the elytra, and the presence of a fourth distinct "chain stria" towards the lateral margin of each elytron, beyond which there is a broad rugose space and indications of other striae. All the numerous examples I have seen of the two sexes agree in these features. The general form of the insect is broad, and only moderately convex; the thorax approaches the cordate shape, that is, its widest part is before the middle, whence it narrows moderately, in a slightly incurved line to the hind angles. All the specimens agree in colour; deep black, with a blueish tinge most perceptible on the sides of the thorax and the elytra.

Heaths and woods, generally distributed.

Var. *punctato-striatus*. In two of Mr. Lewis's specimens the interstices of the elytra are distinctly crenated, the indentations increasing in strength towards the apex. In the absence of other differences I do not venture to separate them specifically.

*C. Yaconinus*, n. sp.

*C. DeHaanii* paululum minor et angustior, supra fusco-cupreus, vix nitidus; thorace subcordato, supra rugoso-punctato, elytris conspicue crenato-striatis, striâ catenulatâ 4<sup>ta</sup> obsoletâ; margine confuse granulato-rugoso.

Long. 13—14 lin. ♂ ♀.

Rather narrower than *DeHaanii* in both sexes, and distinguishable from the crenate-striate form of that species by the absence of the fourth (lateral) chain-stria, this being

replaced by an indistinct row of small granules. The colour of 7 specimens out of the 8 before me is dark brownish-coppery, with the surface much less shining than in *DeHaanii*; the 8th is bluish-black with cyaneous margins. There is scarcely any difference in the form or sculpture of the thorax. I can hardly think it to be a variety of *DeHaanii*. A distinguishing character of *C. Yaconinus* is furnished by the three interstices exterior to the 3rd chain-stria, which are so strongly crenated as to be with difficulty traceable.

Nagasaki and Hiogo.

*C. insulicola*, Chaudoir, Rev. & Mag. Zool. 1869.

Yokohama. Not met with by Mr. Lewis.

Very closely allied to *C. Yaconinus*, but undoubtedly distinct as a species. It has relatively much longer and less oval elytra, with the striae and interstices much less sharply cut, thus receding from the well-marked type of sculpture offered by *C. prodigus*. The striae are regularly and rather coarsely punctured, but the interstices are not so crenated towards the margins and apex as in *C. Yaconinus*, consequently the 3 costae exterior to the 3rd chain-stria are much more distinct, and the central interstices extend to the apex. The 4th chain-stria is reduced to a row of granules. The colour of some dozens of examples that I have seen is light brassy-green, chiefly on the interstices and margin; very rarely it is violet-black with green margins.

*C. Maiyasanus*, n. sp.

Angustior, aeneo-cupreus, nitidus; thorace angustior, ante medium minus dilatato; elytris conspicue crenato-striatis, striâ catenulatâ 4<sup>ta</sup> obsoletâ, margine exteriori lineatim-granulatâ; tibiis et tarsis picco-rufis.

Long.  $10\frac{1}{2}$ —12 lin. ♂ ♀.

Found only at Moon-temple (Maiyasan), Kobé; alt. 2,000 feet.

Of more elongated and narrower form than either of the preceding, and constantly smaller; colour always bright aeneous-coppery, with the tibiae and tarsi reddish. The thorax is narrower; its broadest part is a little before the middle, narrowing a little anteriorly and much more so posteriorly, yet less cordate than in *C. DeHaanii*; sculptured nearly the same, but punctures rather denser. The elytra bear the same proportion to the head and thorax as

in *DeHaanii* and *Yaconinus*, and have not the relative greater length which is seen in *insulicola*; the 4th chain-stria is reduced to a distinct row of granules, but the exterior marginal granulation takes the form of definite longitudinal lines; the dorsal striae are continuous to the apex.

I have examined more than a dozen examples, without finding much variation.

*C. Albrechti*, Morawitz, Bull. Acad. St. Petersb. v. (1863), 321, 1; id. Beitr. Käferfauna Ins. Jesso, p. 10, t. 1, f. 4 (1863).

“Supra subcupreus, vertice lævi, prothoracis lateribus rotundato, ante angulos posticos sinuato, basi arcuatim emarginato; clytris profunde et regulariter striatis, interstitiis angustis, convexis, 4<sup>to</sup>, 8<sup>vo</sup> et 12<sup>mo</sup> catenatis. 22—22½ millim.” Moraw, l. c.

In most of the examples of this species, two characters are observable which distinguish it from its allies; 1, the thorax broadest in the middle; and 2, the impunctate striae of the elytra. Examples however occur in which the thorax is broadest before the middle, and the striae distinctly crenated; thus a satisfactory diagnosis is not possible. It varies also in colour, sometimes being “subcupreus,” but generally blueish-black, like *C. DeHaanii*, some examples being brassy-cupreous, as bright as *C. Maiyasanus*; but I have seen no specimen coloured like *C. insulicola*. The sculpture of the elytra in the punctured examples differs from that of *C. Maiyasanus* only in the punctures not being visible in the bottom of the striae, but only as crenulations on the sides of the interstices.

Morawitz's three specimens came from Hakodadi. I have a specimen taken also at Hakodadi, agreeing exactly as to form and sculpture with his description, but of a blueish-black colour, and agreeing still closer with Chaudoir's description of his *C. striatus* from the north of China. Mr. Lewis found cupreous and blue-black examples with simple and crenated striae at Nagasaki. The *Japonicus* of Motschulsky, of which two different and equally insufficient diagnoses were published, seems to agree best with the typical form of *Albrechti*, although his figure represents the thorax as broadest in front; his *corvinus* is undoubtedly a blue-black variety of the same with crenated striae, and his *multistriatus* a more strongly punctured variety.

The only species here described with which *C. Albrechti* may be confounded is *C. Yaconinus*, which is, however, always larger, with thorax much more narrowed behind than before, and striæ much more conspicuously punctured. *C. Maiyasanus* is sometimes precisely similar to *Albrechti* in form (even of the thorax) and in colour, but the red tibiæ and tarsi amply distinguish it.

The synonymy of the species is as follows:—

*C. Albrechti*, Moraw. l. c. (1862).

*C. Japonicus*, Motschulsky, Etudes. Entom. 1857, p. 111, pl. 1. f. 7 (description worthless); id. Bull. Mosc. 1865, 4, p. 282.

*C. striatus*, Chaud. Rev. & Mag. Zool. 1869 (January), p. 4.

Var. *C. corvinus*, Motsch. Bull. Mosc. 1865, 4, p. 282 (Nagasaki).

*C. multistriatus*, id. p. 283 (Hakodadi).

The prior name of *Japonicus* is not adopted, in the doubt that it may refer to some other allied species.

It is probable that other forms of *Carabus* will yet be found in unexplored parts of Japan, which may bridge over the slight differences existing between the four species above described.

*C. procerulus*, Chaud. Rev. & Mag. Zool. 1862, p. 486. Yokohama. *black opaque 33-35 mm*

*C. granulatus*, Linn. Faun. Succ. n. 781.

Var. *dauricus*, Mannerh.

Yesso. Not met with by Mr. Lewis in the Southern Islands.

*C. tuberculatus*, Fischer, Entom. d. l. Russie, iii. p. 186, t. 7 c, f. 1; *tuberculosus*, Dej. Sp. Gen. v. p. 549; *granosus*, Chaud. Bull. Mosc. 1844, iii. p. 437.

Generally distributed on mountains in Japan. I find no difference between Japanese specimens and those from Eastern Siberia.

*Calosoma Maximowiczi*, Morawitz, Beitr. z. Käferfauna Ins. Jesso, p. 20, t. 1, f. 7.

“Suprà obscure viridi-ænea, prothorace lateribus valde rotundato, postice subangustato, sed non coaretato; elytris punctato-striatis, interstitiis transversim imbricato-rugosis,



4<sup>to</sup>, 8<sup>vo</sup> et 12<sup>mo</sup> foveolis seriatis impressis. ♀ 27 millim." Moraw. l. c.

Morawitz adds that the insect is notably more slender than *C. sycophanta*, the thorax especially narrower, and the elytra less broad at the shoulders. The sides and foveolæ of elytra with a bright greenish tinge.

Found between Skabi and Ssawara.

*C. mikado*, n. sp.

*C. cyanescens*, Motsch. Bull. Mosc. 1859, iv. p. 489 ?

*C. sycophanta* multo angustior, nigrum, marginibus obscure cyaneum; thorace parvo, lateribus æqualiter rotundato, angulis posticis productis, deflexis, acutis; elytris punctato-striatis, interstitiis vix elevatis, transversim imbricato-rugosis, 4<sup>to</sup>, 8<sup>vo</sup> et 12<sup>mo</sup> foveolis concoloribus impressis; tibiis ♂ rectis.

Long. 11 lin. (23 millim.), ♂.

A single ♂ found at Hiogo (on a chestnut tree), and differing from *C. Maximowiczi*, apparently solely in colour, and especially the non-metallic elytral foveolæ. Motschulsky describes his *C. cyanescens* (from the Amur) as having the thorax cordate, and the interstices of the elytra "angustis, valde elevatis," apparently without transverse, imbricate striae. Moreover, the length is given as 8 lines only.

*Nebria livida*, Linn. Syst. Nat. i. 2, p. 670.

Hiogo and Osaka.

I see no difference between Japanese specimens and others from Eastern Siberia, both being larger (8 lines) than European specimens. In some Japanese specimens the lateral pale border is a half or a whole interstice narrower than in others.

*Nebria macrogona*, n. sp.

*N. livida* affinis, multo major; piceo-nigra, palpis, antennis, pedibus apiceque elytrorum fulvo-testaceis, mandibulis rufo-piceis; thorace magis elongato, lateribus antice modice dilatato ibique fortiter angulato, angulis anticis productis, posticis extus prominulis dentiformibus; elytris punctato-striatis, interstitio 3<sup>io</sup> punctis majoribus quinque.

Long. 8½—10 lin. ♂ ♀.

Hiogo and Kawachi; abundant.

This fine *Nebria* is one of the largest of the genus. Its nearest affinity is with *N. livida*, from which it differs in

the much more elongated elytra, longer and less dilated thorax, with prominent lateral angles, and in colour. The head is very similar, not narrowed behind the eyes. The thorax is longer; the anterior angles are much produced, and stand away from the sides of the neck; the margin from the angle is not rounded, but straight or even incurved, and the posterior narrowing is much more gradual. The pale marks of the elytra are confined to a narrow, inconspicuous patch on each side at the apex, which continues for some distance along the extreme lateral edge.

*Nebria pulcherrima*, n. sp.

Flavo-testacea nitida, elytris utrinque mox pone medium plagâ rotundatâ nigrâ.

Long.  $5\frac{1}{2}$  lin. ♂.

Hogo.

Head and thorax much narrower than the elytra, the latter rather short and broad for this genus, deeply striate; the striae regularly punctured, destitute of large punctures on the 3rd interstice. The head is smooth; the eyes large and prominent. The thorax is half the width of the elytra, and cordiform, moderately rounded before the middle, narrowing somewhat gradually to the rather prominent anterior angles, and much more considerably, sinuately, narrowed behind to the very sharp and somewhat produced hind angles; the disk is smooth, and the depressed borders obscurely punctate-rugose. The elytra are broad, but rounded at the shoulders.

Mr. Lewis took several specimens of this handsome species also in China, on the margins of a lake at Kiu-Kiang, Yang-tsze. These are smaller than the Japanese ( $4\frac{1}{3}$  lines). The nearest ally to the species is the *N. xanthacra* of Northern India.

*N. Chinensis*, Bates, Entom. Monthly Mag. Aug. 1872, p. 52.

“Elongata, picco-nigra, antennis, palpis pedibusque rufo-piccis; capite parvo, oculis valde prominentibus; thorace transversim quadrato, postice gradatim leviter angustato; elytris oblongo-parallelis, acute punctato-striatis, interstitiis omnino crebre punctulatis, 3<sup>io</sup> 4-punctato.”

Long.  $6\frac{1}{2}$  lin. l. c.

Nagasaki. (China, on the banks of the Yang-tsze, widely distributed.)

Japanese specimens have the legs darker, dark pitchy, with femora sometimes black, and the elytral interstices not punctured, except towards the sides of the elytra. But in a series of specimens taken by Mr. Lewis at Kiu-Kiang on the Yang-tsze, I find all gradations, though none in which the punctuation entirely fails. The peculiar form of the thorax at once distinguishes the species, in all its varieties; it is much more nearly square than in any of its near congeners, dilated very slightly at one-third the length, and thence very gradually, straightly and moderately narrowed to the base; the hind angles are rectangular and somewhat raised.

Subfam. OZENINÆ.

*Eustra plagiata*, Schmidt-Goebel, Faun. Col. Birmaniae, p. 66; Chand. Ann. Soc. Ent. Belg. t. xi. (Revis. Ozén. p. 31).

Nagasaki, at roots of large trees and in moss.

I believe this is the most northern locality in which a species of the singular group *Ozeninae* has been found. The subfamily may be always recognized by the curious break, or fold, in the lateral margin of the elytra, near the apex. *Eustra* is distinguished as a genus by its acuminate palpi. The Japanese specimens agree precisely with Schmidt-Goebel's excellent description, and it is singular that the species should not yet have been found in any intermediate locality between Birmah and Japan.

Subfam. SCARITINÆ.

*Scarites aterrimus*, Moraw. Beitr. z. Käferf. Ins. Jesso, p. 21, t. 1, f. 8.

Hiogo and Simabara, on sandy beaches; also Hakodadi and the coast of Manchuria.

A species distinguished by its rather short, broad form, the dilated and rectangular head in front of the eyes, and the broad thorax, with the anterior margin deeply arcuate-emarginate, and anterior angles much produced. The dentiform process at hind angles of the thorax is scarcely perceptible, and the elytra are strongly striated, with the striae faintly crenated. The exterior edge of the middle tibiae have only one spine. Out of fourteen specimens only two present the two posterior dorsal punctures of the elytra, described by Morawitz; the rest are impunctate.

*Scarites pacificus*, n. sp.

*S. arenario* proxime affinis, differt elytris simpliciter striatis, capite minus striato, vix punctato. Elongatus, subcylindricus, niger, nitidus; capite plus minusve grosse striato; thorace quadrato, quàm in *S. arenario* paulo longiori, impunctato, basi haud granulato; elytris elongatis subparallelis, basi utrinque fortiter arcuato, valde striatis striis simplicibus, punctis posticis dorsalibus duobus. Tibiæ anticæ suprâ dentes bidenticulatæ; intermediae unispinosæ.

Long. 8—9 lin.

So closely allied to the common Mediterranean *S. arenarius*, that it can scarcely be considered as more than a local variety of it, especially as in some examples traces of punctures may be seen in the bottom of the striae. I should have considered it to be the *acutidens*, Chaud., of Chusan, had not the author described the middle tibiae as having two spines.

Apparently common in Japan, Hiogo, Nagasaki, on clayey soils. I possess a specimen also from the island of Formosa, taken by Mr. Consul Swinhoe.

*Clivina lata*, Putzeys, Revis. Gén. des Clivinides, p. 131.

Nigerrima nitida, antennis pedibusque piccis, palpis rufo-testaceis; capite parvo, levissimo, epistomate late sinuato-truncato, sulco angusto ab fronte separato; occipite sulco transverso acuto punctato; thorace convexo, antice gradatim angustato, levissimo; elytris valde elongatis subparallelis, fortiter punctato-striatis, striâ marginali circa humerum ductâ; femoribus anticis crassis haud dentatis, tibiis anticis extus longe tridentatis et dente obtusissimo superiori; intermediis extus fortiter unispinosis.

Long. 4 lin.

Nagasaki; taken also by Mr. Lewis at Kiu-Kiang, on the Yang-tsze, widely distributed; Rangoon, Neilgherries, Bombay.

I have compared the Japanese and Chinese specimens with one from India, named by M. Putzeys, and find no difference. The species may be known by its large size, and its deep and polished black colour.

*Clivina humilis*, Morawitz, Beitr. z. Käferfaun. Ins. Jesso, p. 22.

*vulgivaga*, Bohem. Eugen. Resa, Entom. p. 9?

Simabara, Tango. Taken also at Kiu-Kiang, on the Yang-tsze; Yesso (Morawitz).

This species is closely allied to the common European *C. fossor*. It is, however, sufficiently distinct, having the elytra conspicuously longer in proportion to the breadth; the 3rd antennal joint much longer than the 4th, and the tibial teeth of the anterior legs longer, especially the uppermost. In colour it is generally chestnut-red; but the disk of the elytra is often of a darker or blackish hue. The description of *vulgivaga* by Boheman is so vague that it is impossible to determine whether it applies to this species or not.

*Clivina Niponensis*, n. sp.

*C. lernææ* affinis. Elongato-oblonga, vix convexa, nigro-picea, antennis, palpis pedibusque piceo-rufis; capite sulcis duobus validis transversis, epistomate antice rotundato; thorace subtiliter omnino transversim rugoso; elytris elongato-ovatis, fortiter punctato-striatis, striâ marginali circa humerum ductâ, interstitio 3<sup>io</sup> quadripunctato; tibiis anticis dentis longissimis, intermediis extus tuberculatis setiferis, sine spinâ elongatâ.

Long.  $2\frac{1}{3}$  lin.

Hiogo; also found at Kiu-Kiang, on the Yang-tsze.

I can detect no marked difference between this species and specimens of *C. lernææ* from Syria, except in the front edge of the epistome being rounded instead of sinuate-truncate. The insect, however, is decidedly shorter, especially in the elytra. The sculpture of the head is similar to that of *lernææ* and many allied species, separated by Putzeys in diverse groups. The punctured occipital groove runs across from the back of the eyes, and its frontal edge is much raised. From the extremities of this groove run two oblique, longitudinal grooves (with their inner edges sharply raised), which end (without meeting) at the transverse groove, separating the epistome from the forehead. The sides of the neck are thickly and coarsely punctured.

*Dyschirius cheloscelis*, n. sp.

*D. nitido* affinis. Elongato-oblongus, læte æneus nitidus, antennis pedibusque rufo-piceis; thorace subovato; elytris elongato-ovatis, usque ad apicem striatis, striis (apice excepto) punctatis, marginali ad humerum desinenti; tibiis anticis edentatis spinâ apicali longissimâ, intus et retrorsum valde curvatâ.

Long.  $1\frac{5}{6}$ —2 lin.

Nagasaki.

Closely allied to the European *D. nitidus*. The antennæ are wholly rufous like the palpi. The thorax is, as in *D. nitidus*, broadest behind the middle, with a deep central furrow, and striated anterior margin. The sutural and second striæ of the elytra are deepened and confluent on the sloping part of the extreme base. The punctures of the striæ are visible almost to the apex. The terminal spine of the tibiæ is longer than the inner spur, and is strongly curved and claw-shaped.

*D. Steno*, n. sp.

*D. filiformi* et *bacillo* affinis; cylindricus, angustus, nigro-æneus, antennis (basi rufo-testaceo excepto) palpis pedibusque rufo-piceis; lamellâ frontali cum clypei alis transversim rugatis; thorace subovato; elytris striato-punctatis, striâ 1<sup>ma</sup> et 2<sup>nda</sup> a foveolâ scutellari incipientibus, 3<sup>ia</sup>—8<sup>va</sup> basi valde abbreviatis, marginali circa humerum haud ductâ; omnibus apicem fere attingentibus sed multo debilioribus; tibiis anticis spinâ terminali calcari breviori, denticulo inferiori spiniformi.

Long.  $1\frac{1}{4}$ — $1\frac{2}{3}$  lin.

Osaka. Four examples. Of narrow, cylindrical form. Front of epistome straight, edentate; the epistome itself is smooth, but the plate above it is obscured by transverse rugæ, which extend to the anterior lobes; the crown is smooth. The thorax is rather narrow, quadrate-ovate, with a few conspicuous striæ across the anterior transverse groove. The elytra are not quite cylindrical, but gradually and slightly narrowed to the tip; the striæ are moderately impressed, and marked with short linear punctures: in certain lights they all appear to reach the apex, though becoming faint and retaining their punctures; the first and second striæ dip at the base, and join the prescutellar foveole; the other striæ are obliterated before reaching the base.

*D. ordinatus*, n. sp.

*D. globoso* proxime affinis. Nigro-æneus, antennis et palpis basi, pedibusque (femoribus anticis piceis exceptis) testaceo-rufis; thorace subgloboso pone medium latiori; elytris subelongato-ovatis, striis octo fortiter punctatis paulo ante apicem evanescentibus; foveolâ præscutellari insulatâ; interstitio 3<sup>io</sup> impunctato; tibiis anticis spinâ apicali calcari haud longiori, denticulo inferiori valido spiniformi.

Long.  $1\frac{1}{3}$  lin.

Hiogo; Nagasaki (at Tomatsu); many examples.



Closely allied to the common European *D. globosus*, differs in the elytral striæ being distinct nearly to the apex. It is the punctures of the striæ, however, that are the most distinctly visible, and in this the species differs from most of its congeners; the punctures are large, and situated in impressed striæ on the disk, but on the sides and towards the tip are simply arranged in rows. The circular foveole near the scutellum is isolated from the sutural and second striæ. The lower denticulation of the anterior tibiæ is prominent and spiniform.

*D. orientalis*, Putzeys, Revis. Gén. des Clivin. p. 92.

Nagasaki; Osaka; Hong Kong (Putzeys).

Three examples, agreeing well with Putzeys' description, made from Hong Kong specimens. It is a small ( $1\frac{1}{4}$  lin.), short species, with ovate elytra; of a glossy chestnut colour, rather brassy on the elytra, and striæ obliterated before the apex; base of antennæ and legs rufo-testaceous.

*D. Hiogoensis*, n. sp.

*D. orientali* proxime affinis, at semper nigro-æneus, pedibus, palpis, basique antennarum rufis, elytris subtilius punctato-striatis. Brevis; capite suprâ lævissimo, epistomate valde convexo; thorace transversim quadrato, angulis rotundatis; suprâ lævissimo, lineâ dorsali debili; elytris punctato-striatis, punctis distantibus, striis ad trientem apicalem evanescentibus, apice plus minusve rufo-testaceo; striis omnibus prope basin obliteratis, foveolâ præscutellari insulatâ; pedibus omnino clare castaneo-rufis; tibiis anticis spinâ terminali quam calcari breviori, denticulo inferiori brevi, distincto.

Long.  $1\frac{1}{4}$  lin.

Hiogo; many examples. The legs, including the anterior femora and all the coxæ, are uniformly clear chestnut-red.

*D. daimiellus*, n. sp.

*D. æneo* affinis at multo minor. Oblongus, nigro-æneus; antennis (basi pallidioribus), palpis pedibusque rufo-piceis; capite suprâ lævi, fronte et epistomate medio longitudinaliter convexo; thorace rotundato, lævi; elytris oblongis punctato-striatis, striis apicem attingentibus sed ibi debilioribus, suturali ab foveolâ præscutellari incipienti, cæteris basi paulo abbreviatis, marginali circa humerum haud ductâ,

*S<sup>va</sup>* multo abbreviatâ et haud impressâ; tibiis anticis spinâ apicali quàm calcari haud longiori, denticulo inferiori acuto.

Long.  $1\frac{1}{2}$  lin.

Nagasaki; two examples. Also at Kiu-Kiang on the Yang-tsze.

The middle of the forehead and epistome is longitudinally convex; hence the frontal transverse suture is indistinct in the middle, and vague and wide on the sides. The thorax is rounded, and about as wide as the elytra; quite smooth, with the dorsal line moderately impressed. The elytra are moderately elongated, cylindrico-oblong; the striae with rather large punctures, becoming fainter near the apex, the three exterior almost obliterated, but the punctures distinct; the sutural stria alone reaches the basal foveole, all the others halt a little short of the base, and the eighth stria is composed only of a line of punctures reaching half-way down the elytron. The legs are pitchy red; the anterior pair darker, with the femora rather brassy. The terminal spine of the anterior tibiae appears rather shorter than the spur; the lower denticulation is prominent and acute, the upper one very obtuse. The antennae have the basal joints rufous, and the rest dusky piceous.

*D. sphærulifer*, n. sp.

*D. orientali* affinis at differt thorace valde rotundato. Brevis, æneus, partibus oris, antennis pedibusque testaceo-rufis; capite suturâ frontali latâ, lamellâ anteriori elevatâ rotundatâ; thorace transverso maxime rotundato lævi; elytris ovatis, grosse punctato-striatis, striis omnibus (suturali exceptâ) longe ante apicem et prope basin oblitteratis, foveolâ præscutellari insulatâ.

Long. 1 lin.

Japan. Two examples (Hiogo).

Distinguished by its strongly-rounded thorax, which shows no trace of the quadrangular form, and is not gradually narrowed (but regularly rounded) anteriorly. The transverse frontal suture and lateral grooves are very wide, so that the anterior plate appears as an isolated prominence. The elytra are short, ovate, and strongly punctate in moderately impressed striae; none of the striae reach the base (the sutural apparently not touching the basal foveole), and all are obliterated before the apex as in *D. globosus*. The terminal spine of the anterior tibiae is, at least, as long as the spur, and the lower denticulation is

prominent and acute. In both specimens the declivous base of the elytra is rufous. The antennæ are rather paler towards the base than in the apical part; the legs are reddish-testaceous.

Division II. *Epimera mesothoracica coxas haud attingentia*.

Group 1. *Pedunculati*.

Subfam. BROSCINÆ.

*Craspedonotus tibialis*, Schaum, Berl. Entom. Zeitschr. 1863, p. 87, t. l., f. 5.

Abundant in sandy places everywhere; inland and on the coast. Mr. Lewis took this remarkable insect also at Foo-chow in China.

Group 2. *Patellimani*.

Subfam. PANAGÆINÆ.

*Eudema flavopilosum*, Chaud.

*Epicosmus* id., Chaud. Bull. Mosc. 1861, 4, p. 14.

Japan; Formosa. Also Bengal. Not met with by Mr. Lewis.

A small species ( $3\frac{1}{2}$  lines), with thorax forming a half-oval, with a reddish spot at the hind angles; antennæ and feet red, palpi and two squarish spots on each elytron orange-tawny.

DISCHISSUS, nov. gen.

Facies *Eudemæ*. Caput ut in gen. *Panagæo*, antice obtusum; oculi valde prominentes; collo constricto. Palpi elongati; articulo terminali ♂ modice securiformi, ♀ obliquiter triangulari, acutissimo. Tarsi omnes articulo 4<sup>to</sup> bilobo, lobis pedum posteriorum minus elongatis acuminatis; antici ♂ haud dilatati. Mentum breve, latum; dente mediano lato, medio impresso, a corpore menti suturâ diviso.

This new genus is formed for the reception of species of *Eudema* which present the striking peculiarity of a bilobed fourth joint to all the tarsi in both sexes. In this character it agrees with *Euschizomerus*, but in that genus the lobes are long and rounded to all the feet, whilst in *Dischissus* the lobes on the hind feet are not so fully developed, being acute, and therefore only to be considered as prolongations of the angles of the fourth joint; in the anterior and

middle feet they form true lobes. The genus differs from *Euschizomerus* also in the broadly-toothed mentum (like *Eudema*), this organ in *Euschizomerus* being without tooth; a suture separates the tooth from the body of the mentum.

In facies the species offer no peculiarity. They are black, with the usual orange spots on the elytra, and oval thorax.

*Dischissus mirandus*, n. sp.

Elongatus, modice convexus, niger, subopacus, breviter fulvo-pubescent, elytris utrinque maculis transversis dentatis submarginalibus aurantiacis duabus; thorace rhomboideo; tarsis omnibus articulo 4<sup>to</sup> bilobo.

Long.  $8\frac{1}{2}$  lin. ♂ ♀.

Nagasaki; many examples. Generally beaten from trees.

Elongate oblong-oval, dull black, densely clothed with short tawny pubescence. Head very obtuse, eyes prominent, neck constricted. Palpi very long, terminal joint broadly securiform in ♂, narrow and very acutely triangular in the ♀; shining black, as well as the basal part of the antennæ; thorax oval; with middle of the sides rather angular in the ♂, quite rounded in ♀, margin after the angle slightly sinuated; hind angles obtuse, notched; surface coarsely confluent-punctate. Elytra oblong-oval, slightly convex, punctate-striate, interstices not closely but distinctly punctured; each elytron has two transverse orange spots, one extending from the margin below the shoulder to the third stria, and widest on the sixth and marginal interstices, the other near the apex composed of five rather short spots on the fourth to eighth interstices, that on the sixth being a little more advanced than the others. The legs are black.

*D. quadrinotatus*.

*Peronomerus* id., Motschulsky, Bull. Mosc. 1864, n. 4, p. 333.

Elongato-ovatus, fusco-niger, thoracis lateribus, maculis elytrorum utrinque duabus subrotundatis pedibusque aurantiaco-fulvis.

Long. 4— $4\frac{1}{4}$  lin. ♂ ♀.

Distributed throughout Kushiin and Nipon; under stones on hill-sides. Many examples.

Although Motschulsky gives only three lines as the

length of his insect and the locality East Indies, I feel no doubt that the species is the same as the Japanese one, his description being (unusually for him) exact and full. But he had no reason whatever for referring it to the genus *Peronomerus*, the essential character of which is the large size and unilobular form of the first tarsal joint of the anterior feet in the ♂. The thorax in *D. quadrinotatus* is suboval, much more narrowed anteriorly than behind, with rather produced hind angles, and yellow lateral border, which is broadish near the base, and narrows to a point before reaching the anterior angle.

*Peronomerus nigrinus*, n. sp.

*P. fumato* simillimus, differt tantùm integumento nullo modo ænescenti, pubescentiâque griseâ.

Long.  $3\frac{1}{2}$ —4 lin. ♂ ♀.

Nagasaki; abundant in May; under stones in Mitsu-yama, in May.

Of precisely similar form to the Chinese *P. fumatus*. Thorax very similar, rhomboïdal, with prominent lateral angles and sinuate margin between the angles and the base. Differs in the brownish-black colour of the integument (instead of brassy-black), and griseous instead of fulvous pubescence.

It might more properly be treated as a local variety of *P. fumatus*. A series of more than twenty of each taken by Mr. Lewis, when placed side by side, exhibit the distinctive characters very clearly. *P. æratus* of Dacca, in Bengal, differs only in the narrower and more obtuse angled thorax.

*Panagæus Japonicus*, Chaudoir, Bull. Mosc. 1861, No. 4, p. 356.

*rubripes*, Morawitz, Beitr. z. Käferfaun. Ins. Jesso, p. 323, t. 1, f. 14.

Hakodadi. Not met with by Mr. Lewis.

The description by Morawitz agrees closely with that of Chaudoir, and it is not clear why the former came to the conclusion that his species was distinct. It is a large handsome species, nearly half an inch in length, with red legs.

*P. singularis*, n. sp.

Elongatus, palpis, antennis pedibusque rufis, femoribus apice nigris; capite angustissimo, collo valde elongato haud

constricto, thorace medio valde elongato, subangulato; elytris fasciâ latâ prope basin (suturâ interruptâ) maculâque magnâ prope apicem aurantiacis.

Long. 5 lin. ♂ ♀.

Nagasaki; many examples, under clods at Tagami.

A species distinguished by its very long, narrow head. The eyes are very prominent; the palpi elongated, and the terminal joint rather strongly securiform in both sexes. The thorax is broad, rhomboïdal, a little more narrowed in front than behind, with the hind angles projecting as a stout blunt tooth; the surface (like the head) clothed with very long brown hairs, and coarsely rugose-punctate. The elytra are oblong, as in *P. crux-major*, pubescent, ornamented with orange-coloured spots, very similar to those of *P. crux-major*; but the anterior one is narrowed towards the suture, and the hind one does not reach the side, but lies on the interstices 3—8 only. The elytra are strongly punctate-striate, with convex and finely punctured interstices. The legs, except the coxæ and tips of femora, are bright red; the antennæ are red, clearer on the basal and apical joints.

*P. robustus*, Morawitz, Beitr. Käferf. Ins. Jesso, p. 30, t. 1, f. 13.

Yesso.

I have not seen any example of this species.

#### Subfam. CHLÆNINÆ.

*Callistomimus modestus*, Schaum, Berl. Ent. Zeit. 1863, p. 85 (*Callistus*).

Id., Chaudoir, Bull. Mosc. 1872, i., p. 382.

*amabilis*, Redtenbacher, Reise d. Novara, Entom., p. 147 (*Callistus*).

Nagasaki. Also Canton, China. Found in damp, sandy places by margins of streams. Runs very nimbly, and takes readily to the water.

This pretty little species forms part of the new genus *Callistomimus*, Chaudoir, distinguished from *Callistus* by the untoothed mentum, and more pointed, hairy palpi.

*Chlænium naviger*, Morawitz, Bull. Acad. St. Petersb. 1862, p. 324; Beitr. Käferf. Ins. Jesso, p. 33, t. 1, f. 16.

Nagasaki.

A slender species, with round, subapical yellow spot on



the elytra. Distinguished from its allies by the uniform, fine punctuation of the thorax.

- ✓ *C. hospes*, Morawitz, Bull. Acad. St. Petersburg. 1862, p. 245; id., Beitr. Käferf. Ins. Jesso, p. 32, t. 1, f. 15.

Nagasaki.

Distinguished from *C. mæviger* by the mixed, finer and larger, punctuation, and wrinkled surface of the thorax.

- ✓ *C. pictus*, Chaudoir, Bull. Mosc. 1856, iii., p. 22;  
*Schoenherri*, Dej. Sp. Gén. v. 626.

Nagasaki. Also Hong Kong. N. India (Chaud.).

Belongs to the group having a large comma-shaped pale spot at the apex of each elytron. It differs from *C. hamifer*, Chaud. (which occurs in Java and the island of Formosa), by its larger size and broader thorax, the sides of which are very regularly arcuated. The upper part of the comma-shaped spot has irregular edges.

- ✓ *C. abstersus*, n. sp.

*C. picto* formâ simillimus, sed differt elytris immaculatis. Elongato-oblongus, capite thoraceque læte viridi-cupreis nitidis; antennis, palpis et pedibus testaceo-rufis; capite subtilissime sparsim punctulato; thorace quadrato lateribus arcuatis, antice plusquam postice angustato, angulis subrotundatis sparsissime grosse punctato; elytris obscure viridis, vel violaceis sericeo-opacis.

Long  $6\frac{1}{2}$ —7 lin. ♂ ♀.

Nagasaki; many examples.

Belonging in form to the group *hamifer*, *sagittarius*, &c., but wanting the comma-shaped apical elytral spot characteristic of the group. The antennæ are moderately short, as in that group, with the middle joints slightly dilated; the dense pubescence beginning at the base of the third joint, which is about equal in length to the fourth. The palpi have subcylindrical and squarely truncate terminal joints. The form of the thorax differs from that of *C. pictus* and *hamifer* in being more narrowed anteriorly than posteriorly, but less so than in *C. sagittarius* and *conformis*. Its surface is finely wrinkled, and the basal foveæ are strongly marked. The elytra are slightly dilated posteriorly, pubescent; finely punctate-striate, with minutely punctured interstices, the punctures veiled by the pubescence. Body beneath black, shining and iridescent.

*C. aspericollis*, n. sp.

*C. guttato* (Esch.) proxime affinis. Elongatus, aeneo-niger, capite cupreo-nitido, thorace elytrisque opacis, palpis, antennarum articulis 3 basalibus, pedibusque rufotestaceis; thorace breviter ovato, grosse crebre punctato; elytris interstitiis valde convexis, maculâ anteapicali sinuatâ flavâ.

Long. 6 lin. ♂.

Nagasaki; two examples.

Nearest allied to *C. guttatus* (Esch., Philippines) and *punctatus* (Chaud., Australia). Elongate and slender; antennæ long, with middle joints dilated. Terminal joints of the palpi widening a little from base to apex, and squarely truncated. Head shining coppery, with green reflections, rather closely and coarsely punctured, but less densely on the crown. Thorax ovate, all angles obtuse and rounded, surface very densely covered with large punctures tending to become confluent; basal foveæ deep and narrow; the colour is dull bronzed black, nearly opaque, but with a greenish tinge on the sides. The elytra are nearly twice the width of the thorax, and nearly three times the length, clothed with very short and dark pubescence; deeply striated with very convex and closely punctured interstices. Before the apex is a transverse yellow spot lying on the 4th—8th interstices, broadest on the 6th. The legs are pale reddish, with a faint dusky spot under the femora at the apex; the antennæ have the 3rd—7th joints dusky.

*C. subhamatus*, Chaudoir, Bull. Mose. 1856, iii. p. 211.

Widely distributed in Japan; Yesso, Nagasaki. Taken by Mr. Lewis also at Kiu-Kiang on the Yang-tsze, and by Mr. A. Adams on the coast of Manchuria.

I hesitated for a long time in referring this insect to the *subhamatus* of Chaudoir, on account of his giving the character “antennis articulo tertio villosa;” which I take to mean that the dense pubescence begins with the third joint, which is decidedly not the case. As the species, however, agrees well with the long and excellent description given by the author, I conclude to adopt his name.

*C. deliciosus*, n. sp.

Elongatus, gracilis; capite viridiæneo nitido, thorace rufo, opaco; elytris nigris opacis, vittâ abbreviatâ mar-

ginali, maculâque suturali ante apicem, rufis; partibus oris, antennis pedibusque testaceo-rufis.

Long.  $5\frac{1}{4}$  lin. ♂ ♀.

Nagasaki; many examples.

A beautiful species of the *C. notula* group. Slender, opaque except the head, which is brassy-green, moderately shining and closely punctulated. Palpi long and slender, with the terminal joints not at all dilated, although obliquely truncated. Labrum squarely truncated in front. Thorax quadrate-ovate, rounded at the sides, and more narrowed posteriorly than in front; lateral rims extremely fine; surface very closely punctulate and pubescent, opaque. Elytra elongate-ovate, punctate-striate, with finely-rugose, plane interstices, opaque and pubescent, sculpture scarcely visible; there is a short tawny-red lateral stripe beginning near the shoulder and ending a little beyond the middle; also a rounded spot over the suture before the apex. The legs are slender and tawny-red. The underside black, highly iridescent and closely punctured.

*C. pericallus*, Redtenbacher, Reise Novara, Coleopt. t. i. f. 4; *pulcher*, id. p. 10.

Osaka. Also found by Mr. Lewis at Kiu-Kiang, on the Yang-tsze-Kiang.

Hong Kong (Redtenb.).

Another handsome species of the *notula* group.

*C. spoliatus*, Rossi, Faun. Etr. i. 79.

Var. *nicanus*, Motsch. Bull. Mosc. 1864, 4, p. 346.

Osaka; two examples. Also Kiu-Kiang, China.

No difference is visible between Japanese and European specimens, except that they are a little longer, with faint traces of larger punctures on the thorax, and a coppery coloration of the third and fifth elytral interstices. As these differences are not constant, and are seen in some European specimens, the form cannot be maintained even as a local variety.

*C. xanthopleurus*, Chaudoir, Bull. Mosc. 1856, iii. p. 230.

Nagasaki. Also Chusan and Hong Kong, and I. Formosa.

*C. circumductus*, Morawitz, Bull. Ac. St. Petersburg. v. 1863, p. 246.

Hiogo. Morawitz's specimens came from the R. Usuri,

in Manchuria. I have examples from the Amur, sent by Maack.

Belongs to the *C. vestitus* group; but has a broad, rather square thorax, gradually narrowed in front, and minutely punctulate. The pale border of the elytra is broad, and not sharply defined; the sides of the thorax are also pale.

*C. callichloris*, n. sp.

*C. sobrino* (Dej.) proxime affinis, at major. *Æneo-viridis*; elytris paulo obscurioribus, margine laterali apice valde dilatato ibique dentato testaceo-flavo; palpis, antennis pedibusque testaceo-flavis; subtus nigro-piceo, abdomine rufo-piceo margine late testaceo-rufo; capite lateribus et collo antice grosse punctatis; thorace transversim cordato-quadrato, antice fortiter rotundato, versus apicem subgradatim angustato, angulis anticis haud conspicuis, prope basin fortiter sinuatim angustato, angulis posticis acutis, suprâ æqualiter passim punctato.

Long.  $4\frac{1}{2}$  lin. ♂ ♀.

Japan. Also at Kiu-Kiang, on the Yang-tsze, China.

The head and thorax are clearer green and shining; the elytra slightly olivaceous and subopaque, densely clothed with long, laid pubescence. The thorax is similar in shape to that of the Indian *C. sobrinus*, but the anterior narrowing is rather more gradual, and the anterior angles lie nearer to the sides of the neck, and are less conspicuous; the dorsal line and long basal line on each side are strongly impressed; the punctures are much larger, and the interstices more glossy than in *C. sobrinus*. The elytra are punctate-striate, the interstices nearly plane and very minutely punctured; the yellow border occupies the two marginal interstices, but is much dilated at the apex. The sterna are coarsely, the abdomen very faintly punctured.

- ✓ *C. inops*, Chaud. Bull. Mosc. 1856, iii. p. 239; *arcuaticollis*, Motsch. Etudes Entom. 1860, p. 7; *vestitus*, var. Moraw.

Simabara; Osaka; Hiogo. Also Chusan and Kiu-Kiang, China. Korea; Coast of Manchuria; I. Formosa.

Very closely resembling the European *C. vestitus* differing chiefly in the thorax being broadest near the middle, and narrowing as much anteriorly as behind.

*C. culminatus*, n. sp.

Ad sect. *Epomis* pertinet. Elongatus, postice dilatatus, omnino breviter pubescens; capite thoraceque læte cupreo-æneis, elytris viridibus subopacis, flavo-marginatis, interstitiis subacute elevatis; antennis, palpis, pedibus abdominisque marginibus flavo-testaceis.

Long. 10—11 lin. ♂ ♀.

Nagasaki, six examples. Also in Che-Kiang, China.

Distinguished from its allies by the fine dark-green colour, and sharply raised interstices of the elytra. The head and thorax are of a rich coppery hue, tinged with golden green. The sides of the forehead and the neck have numerous large punctures, similar to those which are scattered pretty regularly over the thorax; the latter is narrower than usual in this section, with the sides much sinuated posteriorly. The summits of the ridges of the elytra are smooth, the sides of the same have each one row of granulate punctures.

A very closely allied but local form, or species, occurs at Hong Kong.

*C. Noguchii*, n. sp.

✓ *C. chlorophano* (Dej.) formâ subsimilis, at thorace angustiori. Elongatus, depressus, obscure æneus, nitidus; antennis articulis 3 basalibus, femoribus tibiisque testaceo-rufis; palpis et tarsis piceis; thorace angusto, quadrato-cordato; elytris utrinque costis septem lævibus.

Long.  $6\frac{1}{2}$ —7 lin. ♂ ♀.

Kawachi; abundant.

A species distinguished by its depressed form, narrow head and thorax, and costate elytra. The head and thorax are greenish-brassy, shining and nearly smooth, the margins and base of the latter being indistinctly rugulose and punctate. The head has a distinct, slightly constricted neck; the labrum is truncated in front; the terminal joints of the palpi are cylindrical and truncated. The mentum is narrow, with long pointed side lobes and bifid central tooth. The thorax is narrow, gradually rounded from the front angles to one-third the length, then narrowed and sinuated to the hind angles, the latter being produced and acute. The elytra are oblong and depressed, greenish-black, slightly shining, with the furrows and sides cinereous pubescent; they are punctate-striate, with interstices 1—7 (including the suture) elevated and smooth, punctured only on their sides; the two marginal

interstices are plane and closely punctulate. Body beneath black, clothed with fine ashy pile.

Named after Noguchi, Mr. Lewis's meritorious Japanese collector.

*C. variicornis*, Morawitz, Beitr. Käferfaun. Ins. Jesso, p. 35, t. 1, f. 17.

Elongatus, fortiter convexus; opacus, fulvo-aureo dense pubescens, capite glabro aureo-viridi excepto; antennis articulis 3 basalibus, palpis pedibusque testaceo-rufis; thorace ovato densissime ruguloso-punctulato, obscure aeneo; elytris olivaceo-nigris opacis, punctato-striatis, interstitiis planis creberrime punctulatis.

Long. 6 lin. ♂ ♀.

Nagasaki; Hakodadi (Morawitz).

Much longer and more slender than *C. nigricornis*, and with longer antennæ. The head is small and eyes very prominent; it is highly polished, though covered with a fine punctuation, dense only on the neck. The antennæ are very long and tapering, with third joint much longer than any of the rest; they are dull piceous, the second and third and apical joints rather clearer, and the scape red. The thorax is moderately narrow and ovate, its greatest width being a little before the middle, whence it narrows pretty equally to the front and behind; the posterior narrowing is a little sinuated, but the hind angles are obtuse and rounded; the surface is covered very densely with fine punctured rugulæ. The elytra are very convex, and clothed in fine fresh specimens with decumbent golden-tawny pubescence; the punctures of the striæ are very distinct.

*C. ocreatus*, n. sp.

*C. variicorni* simillimus; differt thoracis angulis posticis rectis, tarsis nigris, etc. Elongatus, gracilis; nigro-viridis opacus, cinereo-pubescens, capite glabro, cupreo; palpis, femoribus tibiisque rufis; antennis tarsisque nigris, illis scapo rufo; thorace angustiori, quadrato-ovato, angulis posticis rectis.

Long.  $5\frac{1}{2}$  lin. ♂ ♀.

Hiogo, Ōsaka.

Of narrow, elongate form. Head shining coppery or green, faintly punctulate, more densely on the neck. Antennæ long, black, scape red; palpi red, much elongated; labrum and mandibles pitchy-black. Thorax quadrate



subovate; softly rounded on the sides, widest in the middle, rather strongly sinuate behind, with the hind angles rectangular; surface very minutely and densely rugulose. Elytra with well-marked, punctured striae, interstices minutely punctate-rugulose. Legs red, tarsi black.

*C. pallipes*, Gebler, Mém. Mosc. vi. 1823, p. 128.

*C. corpulentus*, Motsch. Etud. Entom. 1860, p. 7.

Hiogo; Awomori; Hakodadi. Also Amur and Lake Baikal.

I have seen a large number of specimens of this species, both from Japan and Eastern Siberia, and like Morawitz have been unable to see any difference between them.

*C. præfectus*, n. sp.

*C. quadricolori* affinis, at magis elongatus. Valde elongato-oblongus, brevissime sparsim pubescens; capite thoraceque cupreo-viridibus nitidis, hoc elongato-quadrato sparsim ruguloso et punctato; elytris nigro-aneis limbo viridi, striatis, interstitiis elevatis; antennis, palpis pedibusque rufis.

Long.  $7\frac{1}{2}$ —9 lin. ♂ ♀.

Nagasaki.

Distinguished among the numerous species of the *C. quadricolor* group by its very elongate and oblong or sub-parallel form. The head is coarsely but sparsely punctured, and the neck depressed. The thorax is as long as broad, widest in the middle, and equally narrowed before and behind, with the exception that the posterior narrowing is slightly sinuate; the anterior angles are much deflexed towards the sides of the neck, the posterior are obtuse owing to a slight obliquity, near each angle, of the hind margin; the surface is much wrinkled and marked with large scattered punctures. The elytra are elongate and not at all ovate; the faintly punctured striae lie in deep sulci; the interstices are convex, and very faintly punctured; the dorsal surface is obscure, and the sides green. The underside is wholly black.

✓ *C. costiger*, Chaudoir, Bull. Mosc. 1856, iii. p. 258.

Nagasaki. Also in China, on the Yang-tsze, and at Hong Kong; I. Formosa.

A fine large species, reaching nearly an inch in length, and having the elytral interstices raised into narrow costæ.

Subfam. OÖDIDINÆ.

*Oödes vicarius*, n. sp.

*Oö. Americano* simillimus; differt elytris striis tenuioribus et subtilius punctatis. Late oblongo-ovatus, niger, subnitidus; thorace a basi usque ad apicem lateraliter arcuato et modice angustato; suprâ lævi, sericeo-nitenti; elytris thorace paululum angustioribus tenuiter striatis, striis subtilissime punctatis.

Long. 6 lin. ♂ ♀.

Hiogo.

So similar to *O. Americanus* of the Atlantic States of North America, that a minute comparison has revealed no other points of difference than the finer punctate-striæ of the elytra, and the longer and more tapering shape of the dilated third joint of the anterior tarsi in the ♂.

*Oö. prolixus*, n. sp.

Elongatus, parallelipipedus, niger, nitidus; antennis elongatis, gracilibus; thorace elongato, antice rotundato-angustato, supra lævi; elytris acute striatis, striis vix punctulatis, interstitiis fere planis, 3<sup>io</sup> bipunctato.

Long. 5 lin.; lat. elytr. 1 $\frac{3}{4}$  lin.

Hiogo.

A very elongate, parallel-sided species; wholly deep black. The antennæ and palpi are longer and more slender than in *Oö. helopioides*. The thorax is a little broader than the elytra at the base, arcuated, elongated, and gradually narrowed to the apex; the upper surface quite smooth, except the fine dorsal line. The elytra are very elongate and parallel, finely striated; the striæ very minutely punctulate, and the interstices quite plane. The third dilated joint of the ♂ fore tarsi is rather narrower and much longer than the second. Beneath the body is shining black, with the sides of the breast and abdomen faintly punctulate. The prosternal process advances as a thick, obtuse wedge beyond the anterior coxæ, and its upper surface has a very fine, well-defined rim.

*Oö. vilis*, Chaudoir, Bull. Mosc. 1857, iii. p. 32.

Osaka.

A small species (3 $\frac{1}{2}$  lines), very much resembling in its

short, oval outline the European *Oö. Hispanicus*, but more completely elliptical, the curve of the thorax being nearly exactly continuous with that of the elytra. The eyes, too, are less prominent, and the prosternal process does not project as a spine, but is wedge-shaped. The dorsal line of the thorax is scarcely visible. As in *Oö. Hispanicus*, the 7th elytral stria is obliterated, except near the apex.

*Lachnocrepis Japonicus*, n. sp.

Maxime elongatus, angustus, nigro-piceus; palpis, antennis, tibiis et tarsis rufo-piceis; thorace elongato, basi elytris haud latiori angulis obtusis, antice gradatim paululum angustato, lateribus modice arcuatis, elytris punctulato-striatis, interstitiis planis.

Long. 5 lin.; lat.  $1\frac{1}{2}$  lin. ♀ ♂.

Nagasaki. Also found by Mr. Lewis at Kiu-Kiang, on the Yang-tsze, in China.

This species is interesting as belonging to a genus hitherto known only as inhabiting the Atlantic States of North America. It is distinguished from *Oödes* by the four basal tarsal joints in both sexes having their soles clothed with a dense brush of soft hairs, and by the 4th joint of the anterior tarsi in the ♂ being dilated. In the Japanese species the three basal joints of the ♂ anterior tarsi are clothed in the middle with erect hair-scales (the so-called *papillæ* of some authors), which I do not detect in the 4th joint, in which soft hairs clothe the sole. I believe this is the case also with the North American species (*L. parallelus*, Say).

*L. Japonicus* is rather smaller and much narrower than *L. parallelus*, with finer elytral striæ, and more rufous antennæ and legs. The sides of the thorax, especially towards the hind angles, are rufescent-pitchy, as in that species.

Subfam. LICININÆ.

*Rembus opacus*, Chaudoir, Bull. Mosc. 1852, i. p. 67.

Osaka. Three examples, all female. Chusan (Chaudoir).

Long. 6— $7\frac{1}{2}$  lin.

Black, subopaque. Abbreviated juxta-scutellar stria present. Striæ fine, but sharp, impunctate; third interstice without punctures. Mandibles much more elongated and pointed than in the allied species.

*R. gigas*, n. sp.

*R. Zealandicus*, Redtenbacher, Reise d. Novara, p. 10,  
t. 1, f. 5?

*R. opaco* affinis, at multo major. Elongatus, parum convexus, niger, subopacus; thorace subquadrato, antice et postice fere æqualiter angustato, foveâ utrinque basali sulciformi, angulis posticis obtusis; elytris oblongo-ovatis, marginibus explanatis, fortiter striatis, interstitiis parum convexis haud punctatis, striâ abbreviatâ juxta-scutellari profundâ.

Long. 9—12 lin. ♂ ♀.

Nagasaki; Chusan and Yang-tsze-Kiang, China; I. Formosa.

I have little doubt this not uncommon Chinese insect is the one described and figured by Redtenbacher, with the erroneous locality, *Auckland, New Zealand*, appended to it. The beautiful figure agrees in every respect, except the prominent hind angles, which character is, however, contradicted by the description "die winkel stumpf." The only discrepancy in the description is the heart-shaped labrum, this organ being deeply sinuated, although much less bilobed than in the other species. The species differs from its allies in its longer thorax, widest near the middle, and narrowed quite as much in front as behind. The eyes are not so prominent as in other species, and the edge of the epistome is deeply sinuated. The legs and underside of the body are glossy black, while the upper surface is rendered sericeous-opake by the minute rugosity of the integument. In rare cases the elytral striæ are finely punctulate.

If the species be really found in New Zealand, Redtenbacher's name will stand; but, if not, I presume it will be inadmissible.

*R. elongatus*, n. sp.

Elongato-oblongus, convexus, niger, nitidus; thorace quadrato, antice angustato, postice paululum sinuato-angustato, angulis posticis valde obtusis; elytris fortiter striatis, interstitiis convexis impunctatis, striâ abbreviatâ juxta-scutellari profundâ.

Long. 12 lin. ♀.

Hiogo; one example. Also at Kiu-Kiang, on the Yang-tsze, in China.

Differs from the ordinary form of the genus in being parallel-sided and very convex. The head is not depressed

on the front, and the epistome is very broadly sinuated, almost straight. The eyes are not so prominent as in *R. Aegyptiacus*; the mandibles are very broad and obtuse. The labrum is short and deeply notched. The thorax is nearly square, very little rounded anteriorly, narrowed in front, and slightly narrowed, with a distinct sinuation, behind; but the hind angles are very obtuse. The basal foveæ are deep and broad. There are faint traces of punctures in the bottom of the deeply-sunk striæ of the elytra. The Chinese specimen is less convex and less deeply striated, but offers no well-marked specific difference.

The species seems to connect *Eccoptogenius* (Chaud.) with *Rembus*; its antennæ and legs being robust, and the anterior tibiæ rather more dilated at the apex, with a comb-like row of short spines on the outer edge. This latter character is seen also, in a somewhat minor degree, in the more robust species of *Rembus*.

*Badister pictus*, n. sp.

*B. bipustulato* similis, at magis elongatus. Angustatus, niger, nitidus; thorace, pedibus, antennarum scapo et palpis (articulis ultimis exceptis) testaceo-rufis; elytris testaceo-rufis iridescentibus, maculis utrinque late separatis duabus; antennarum articulis 7—11 fulvis.

Long.  $3\frac{1}{4}$  lin. ♂ ♀.

Kawachi.

The head is minutely shagreened and small in both sexes. The thorax is much longer than in *B. bipustulatus*, shagreened and subopaque; gradually narrowed behind, with rounded hind angles. The elytra are sharply and finely striated; both the black spots are lateral, the one in the middle, extending from the 2nd to the 8th stria, and the other subtriangular, at the outer angle of the apex, reaching the margin, except for the red, reflexed edge of the elytron. The 1st antennal joint is red; the 2nd red, with a black spot; the 3rd—6th black, and 7th—11th tawny-red. Beneath, the prothorax and the mesothorax are red; the rest black.

*B. nigriceps*, Morawitz, Beitr. Käferf. Ins. Jesso, p. 36.

“Fuscus, capite nigro, prothorace rufo, basin versus attenuato, utrinque profunde impresso; elytris testaceis, cæruleo-submicantibus, tenuiter striatis, interstitio tertio

hipunctato; antennarum articulo primo pedibusque testaceis.  $4\frac{1}{2}$  millim. ♀." (Moraw.)

Hakodadi.

Allied to *B. peltatus*.

*B. vittatus*, n. sp.

Testaceo-fulvus, capite, antennis medio, vittâque latâ elytrorum, communi, suturali, fusco-nigris.

Long. 3 lin. ♂.

Kawachi. One specimen.

Elongate, slender. Head very finely shagreened; epistome, labrum and palpi tawny-red. Thorax with sides strongly arcuated, narrowing much to the base; hind angles scarcely indicated, and sides of base very oblique. Elytra strongly, silky-iridescent, deeply striated, glossy-fulvous, with a black sutural vitta occupying interstices 1—3, but terminating a little before the apex. The under-side is testaceous-yellow.

*B. marginellus*, n. sp.

*B. peltato* formâ similis. Gracilis, piceo-fuscus, capite obscuriori, thorace et elytris testaceo-rufo marginatis, his aeneo-nitidis profunde striatis; pedibus flavo-testaceis.

Long.  $2\frac{1}{2}$  lin. ♂ ♀.

Nagasaki.

The head is black, finely shagreened; the labrum pale. The palpi and two basal joints of the antennæ are pale pitchy-red; the rest of the antennæ darker piceous, becoming tawny towards the apex. The thorax is subquadrate, moderately narrowed behind, with the hind angles distinct, though very obtuse and much reflexed, together with the whole of the lateral margin near the angle; the sides of the base are cut obliquely towards the angle, much more so than in *B. peltatus*; the middle is strigose, and the foveæ on each side very deep; the surface is glossy, blackish-brown, with pallid and tolerably well-defined lateral border. The elytra are brassy-brown, glossy and slightly iridescent, deeply striated, with the reflexed margin all round pallid-testaceous. Legs testaceous-yellow.

Group 3. *Quadripalmati*.

Subfam. ANISODACTYLINÆ.

*Anisodactylus signatus*, Illig. Käf. Preuss. i. 174.

Nagasaki (many examples); Hakodadi. Also R.



Amur, E. Siberia, Caucasus, and South and Central Europe.

I see no difference between Japanese and European specimens of this well-known insect.

*A. punctatipennis*, Morawitz, Bull. Ac. St. Petersb. 1862, 326 ; id., Beitr. Käferf. Ins. Jesso, p. 65.

Hiogo ; Nagasaki (abundant in marshy places) ; Hakodadi.

Closely resembling the common European *A. binotatus* ; but distinct in the punctulate interstices of the elytra and the broader and more regularly rounded thorax.

*A. tricuspidatus*, Morawitz, Beitr. Käferf. Ins. Jesso, p. 66.

Hiogo. One example.

Differs from *A. punctatipennis* chiefly by the tridentate apical spur of the anterior tibiae.

*Dichirotrichus tenuimanus*, n. sp.

*D. pubescenti* similis ; minor, thoracis angulis posticis obtusis haud prominulis. Elongatus, dense breviter pubescens, nigro-piceus, thoracis limbo elytrorumque marginibus fulvo-piceis, pedibus flavo-testaceis ; thorace quadrato-subcordato basi utrinque oblique truncato, angulis posticis obtusis ; tarsis anticis ♂ anguste dilatatis.

Long  $2\frac{1}{4}$ — $2\frac{3}{4}$  lin. ♂ ♀.

Hiogo ; Nagasaki.

Differs from both *D. pubescens* and *ustulatus* in the form of the thorax, which is narrowed behind gradually and without sinuation, the hind angles being obtuse, and with only a very minute point at their apices. The surface of the head and thorax is more finely and densely punctured than in *D. pubescens*, but the punctures stand at considerable distances from each other, especially on the disks ; they are shining, pitchy-black, with the limb of the thorax indeterminately rufous. The mouth and palpi are more or less pallid, the last joint of the maxillaries at the base and the penultimate being often black ; the palpi are more acutely pointed than in the allied species. The striae of the elytra are fine, but sharply cut ; the scutellar striae wanting, the interstices very finely punctured ; the colour of the elytra is rusty-red, with the whole disk of each blackish, leaving ill-defined, narrow, apical and

sutural, and broader basal and lateral, margins of the ground colour. The legs are pale yellowish-tawny; the antennæ vary in colour, being rufous or fuscous, with the base pale. Beneath the body is shining black, punctured and pubescent. The four joints of the anterior tarsi of the male are very moderately dilated, triangular, with the angles rounded.

Subfam. HARPALINÆ.

*Harpalus capito*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 359; *H. cephalotes*, Motsch. Etudes Ent. 1861, p. 3 (name preocc.)

Nagasaki; in sandy places. Also at Kiu-Kiang on the Yang-tsze, and on the Usuri, in Manchuria.

Allied to *H. ruficornis*, but with head of very large size and acute hind angles to the thorax.

*H. ruficornis*, Fab. et auctor.

Nagasaki; Yesso.

As Morawitz remarks, Japanese specimens differ from European in the obtuse hind angles of the thorax. I do not see clearly the other difference he points out, namely, the feeble sinuation of the apex of the elytra. They agree precisely in size and facies, and the obtuse thoracic angles are shared in by East Siberian specimens from Lake Baikal to Manchuria.

*H. griseus*, Panz.; Dej. Spéc. Gen. iv. 251.

Hiogo; Hakodadi (Morawitz); Shanghai; East Siberia (apparently very common).

I see no difference between Japanese, Siberian and French specimens of this species; the hind angles of the thorax are not quite so obtuse as in Japanese specimens of *ruficornis*. There remains only the relatively smaller head and broader flattened margins of the thorax (besides the inferior size) to distinguish *griseus*.

*H. roninus*, n. sp.

Magnus, oblongus, niger, dense breviter fulvo-pubescent, omnino crebre punctulatus; palpis antennisque rufo-piceis; thorace quadrato, lateribus antice paulo rotundato postice parum angustato, angulis obtusis; elytris simpliciter striatis, apice fortiter sinuatis.

Long.  $7\frac{1}{2}$ — $9\frac{1}{2}$  lin. ♀ ♂.

Nagasaki; confined to granitic districts.

Allied to *H. ruficornis*, but entirely dull black, with the exception of the tawny-reddish antennæ and palpi, and the entire upper surface is minutely punctulated, the elytra having a tawny silky pubescence similar to *ruficornis*. The head is similar in form, but relatively larger, in both sexes. The thorax is larger, more regularly rounded on the sides, and with raised lateral rims (not explanate) and obtuse hind angles; its whole surface is punctulate.

✓ *H. tridens*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 326; id. Beitr. p. 69, t. 1, f. 26.

Hakodadi.

I have not seen this species, which resembles a small *ruficornis*, but has impunctate inner interstices of the elytra, and a tridentate spur to the anterior tibiæ.

*H. lævicollis*, Dufts. Fn. Austr. ii. 163; Morawitz, Beitr. p. 71; *rugicollis*, Motsch. Etudes Ent. 1860, p. 5.?

Nagasaki; Hiogo (abundant); Hakodadi (Moraw.).

Japanese specimens differ from those of central Europe in being perceptibly more convex, of a browner-black hue, and having the antennæ, like the legs, wholly tawny-reddish. As, however, it is a variable species in Europe, I agree with Morawitz in thinking it inadvisable to distinguish it by a separate name. Motschulsky has stated that his *rugicollis* = *Japonicus*, Moraw. If so, his description is utterly beside the mark; but it is perhaps waste of time to try to understand what this recklessly inaccurate author meant by his diagnosis.

*H. Japonicus*, Morawitz, Bull. Ac. St. Petersb. v. 1863, 327.

Hiogo; Nagasaki; Hakodadi. Also at Kiu-Kiang, on the Yang-tsze, Shanghai, Foochow, and abundant in the Island of Formosa.

*H. argutoroides*, n. sp.

Elongatus, niger nitidus, partibus oris, antennis extus, pedibusque rufo-piceis; capite parvo, thorace valde elongato-quadrato, lateribus antice leviter rotundato, postice perparum angustato, angulis posticis rectis, basi utrinque foveâ magnâ grosse punctatâ; elytris oblongis, apice nullo modo sinuatis, fortiter striatis.

Long. 4 lin. ♂.

Nagasaki; several examples, under dead leaves.

A peculiar species, owing to its small head and elongate-quadrate thorax, which give it a facies different from all other *Harpali*. The mandibles are longer than is customary in this genus, and project further beyond the labrum; the last joint of the maxillary palpi is quite as long as the penultimate, and tapers more towards the apex, which latter, however, is distinctly truncated; the mentum has a short acute tooth. The head is very smooth and shining, with the transverse line, as well as lateral foveæ, deeply impressed. The thorax is not quite so long as broad, nearly square, with distinct anterior, and rectangular posterior, angles; the sides are slightly rounded anteriorly, and very feebly narrowed (without sinuation) behind the middle; the lateral margins form a thick raised rim, which is separated from the disk by a strong furrow, and is of a reddish colour; the basal foveæ stand midway between the deep dorsal line and the angle, and are oblong, deep and coarsely punctured. The elytra are very little broader than the thorax, parallel, deeply striated and faintly sinuated near the apex; the interstices are convex and impunctate; there is an indistinct setiferous puncture on the 3rd (close to the 2nd stria), and the scutellar striole is very short. The underside of the thorax is sparingly and coarsely punctured.

✓ *H. platynotus*, n. sp.

Latus, convexus, nigro-piceus, parum nitidus; palpis, antennis pedibusque rufo-piceis; capite lævi; thorace elytris latiori, subtiliter coriaceo, lateribus et basi punctulato-rugoso, angulis posticis subrectis; elytris breviter oblongis, simpliciter fortiter striatis, glabris; tibiis anticis apice extus dilatatis.

Long. 6—7 lin. ♂ ♀.

Hiogo; Awomori.

Unlike any other species of *Harpalus* known to me. Shorter and broader even than *H. zabroïdes*, but the thorax (especially in large examples) dilated anteriorly and wider there than the elytra. The colour is dark pitchy, and the surface dull, owing to the fine coriaceous sculpture; destitute of pubescence. The head is impunctate. The thorax is transverse-quadrate, strongly rounded on the sides anteriorly, and narrowed (without distinct sinuation) from the middle to the nearly rectangular hind angles; the lateral raised (rufous) margin is separated from the disk by a broad coarsely punctured groove, and the whole

base (to one-third the thoracic surface) is thickly and rugosely punctulated; a raised rim extends uniformly along the basal margin. The elytra are convex, and suddenly declivous at the apex; the striae are very deep; the 3rd interstice has a setiferous puncture; the lateral interstices are more distinctly coriaceous and opaque than the dorsal. The legs are short and stout; the basal joint of the hind tarsi is not larger than the 2nd; the anterior tibiae are much dilated externally.

*H. chalcatus*, n. sp.

Elongato-oblongus, supra viridi vel cupreo-aeneus, politus, feminae elytris cupreis sericeo-opacis; palpis antennisque piceo-rufis, pedibus piceis; capite impunctato; thorace quadrato lateribus antice perparum rotundato, antice angustato, postice vix angustato angulis posticis subrectis, basi late et lateribus anguste crebre punctatis; elytris apice parum sinuatis, fortiter striatis, interstitiis subplanis impunctatis, 3<sup>io</sup> puncto setifero unico.

Long.  $5\frac{1}{2}$ — $6\frac{1}{2}$  lin. ♀ ♂.

Hiogo; Nagasaki. Also Korea and Kiu-Kiang on the Yang-tsze, China.

Differs from the European metallic *Harpali* by its more elongate shape, and by the metallic colouring of the ♀, which differs only from the ♂ in the elytra being silky-opaque, cupreous. The thorax is very slightly rotundate, dilated anteriorly, and only very slightly narrowed (without sinuation) behind; the hind angles are nearly rectangular, though rounded at their apices; in front the thorax is narrowed to the anterior angles; the lateral rim is separate from the disk by a shallow groove, thickly punctured and subrugose like the whole of the base. The elytra are elongate-oblong, deeply striated, highly-polished and smooth in the ♀ with slightly convex interstices; silky-opaque in the ♂, with flat interstices. The apical sinuation is broad and shallow. The legs are shining pitchy-black, with the anterior tarsi redder; the antennae and palpi are tawny-red. In colour the head and thorax are generally greener than the elytra.

Apparently allied to *H. erosus*, Dej., of Siberia, which is at once distinguished by the deep apical emargination of the elytra.

*H. tinctulus*, n. sp.

*H. limbato* (Dufts.) proxime affinis, at multo minor elytrisque cyaneo-tinctis. Parvus, piceo-niger, elytris ♂

nitidis cyaneo-relucentibus, ♀ sericeo-opacis; palpis, antennis pedibusque rufo-testaceis; thorace quadrato lateribus antice paulo rotundatis, postice parum angustatis, angulis posticis subrectis, basi omnino crebre punctulato, margine laterali rufescenti; elytris apice leviter sinuatis, fortiter striatis, interstitio 3<sup>io</sup> postice unipunctato.

Long. 3—3½ lin. ♀ ♂.

Nagasaki. Also Korea and Kiu-Kiang on the Yangtze, China. Abundant.

Precisely similar in shape, sculpture and colours to the European *H. limbatus*, except that the elytra of the ♂ have a blue or green gloss. The base of the thorax over a wide space is minutely punctured, the punctuation extending on each side far towards the disk; this character distinguishes it from *H. luteicornis*, with which it agrees better than with *H. limbatus* in the rectangular hind angles of the thorax. The setiferous puncture of the elytra lies very far back; the striae are deeper towards the apex, and the interstices more convex; the extreme lateral margins of the elytra are rufescent. The female has silky-opaque elytra, with a slight greenish gloss.

*H. relucens*, n. sp.

Oblongo-ellipticus, picco-niger in utroque sexu nitidus, elytris virescenti-relucentibus; palpis, antennis, thoracis margine laterali pedibusque fulvis; thorace transverso, antice angustato lateribus parum arcuatis, angulis posticis subrotundatis, basi toto lateribusque crebre punctatis; elytris fortiter striatis, interstitiis subplanis tertio unipunctato.

Long. 3 lin. ♂ ♀.

Nagasaki (many examples); also in China, at Foochow.

Similar to *H. tinctulus* in facies and colour, but distinguished by the thorax having the posterior angles very obtuse and almost rounded, and by the ♀ being quite as polished as the ♂; the surface of both being very glossy. The striae become sulci towards the apex, and the interstices narrow and convex. The thorax is as wide anteriorly as the elytra, but narrows slightly behind.

*H. rubefactus*, n. sp.

Rufo-testaceus, ♂ nitidus, ♀ sericeo-subopacus; capite polito, laevi; thorace transversim quadrato, lateribus antice paululum rotundato, postice vix angustato, angulis posticis rectis, basi toto late discrete punctato; elytris mox pone medium angustatis, apice vix sinuatis, fortiter striatis,



interstitio 3<sup>io</sup> puncto setifero magno, lateribus subtiliter coriaceis; tibiis anticis extus apice productis.

Long.  $4\frac{1}{2}$  lin. ♂ ♀.

Hiogo.

A curious species, distinguished by its rufous colour (rusty testaceous above, pallid beneath), and by the elytra narrowing from after the middle to the apex. The thorax is short and broad, but not so wide as the elytra; it broadens very slightly for a short distance from the anterior angles, and narrows again from the middle, almost imperceptibly to the base; the posterior angles are quite rectangular, and the whole base is covered with punctures. The elytra have a shallow sinuation near the apex; the striae are simple and deep, and the setiferous puncture on the 3rd interstice is large and conspicuous. The anterior tibiae have their anterior outer angles produced and oblique.

*H. discrepans*, Morawitz, Bull. Ac. St. Petersb. v. 1863, 327.

Yesso.

Mr. Lewis did not meet with this, which is a shining black species, allied to *H. limbatus*, but with black legs and punctulated elytral interstices.

*H. fuliginosus*, Dufts. Fn. Austr. ii. 83.

Yesso (Morawitz).

I have not seen Japanese specimens of this well-known European species.

*H. zabroides*, Dej. Spéc. Gen. iv. 343; *Pheuginus corporosus*, Motsch. Etudes Ent. 1861, p. 3.

Hakodadi (Morawitz).

Also a well-known European species. According to Morawitz, Japanese specimens differ in having crenated elytral striae.

*H. lucidus*, Morawitz, Beitr. p. 72, t. 1, f. 28.

Hakodadi.

“Luteus, elytris nigris chalybeo-micantibus.”

I have seen nothing approaching the peculiar coloration of this species from Japan.

*Tachycellus anchomenoides*, n. sp.

Elongatus obovatus, niger nitidus, partibus oris, antennarum scapo, thoracis margine angustissimo pedibusque

rufo-piceis; thorace postice angustato angulis posticis rotundatis, basi sparsim punctato.

Long.  $2\frac{2}{3}$  lin. ♂ ♀.

Nagasaki.

Allied to *T. curtulus*, Moraw. (R. Amur), differing chiefly in the black clytra. The head is small and smooth. The thorax is about half the width of the clytra, moderately and regularly rounded on the sides, a little more narrowed behind than before, and with rounded hind angles; the basal foveæ are large and rather deep, coarsely but sparsely punctured; the reflexed lateral margins are translucent pitchy-red. The clytra are oblong-ovate, widened behind, obliquely sinuate near the apex; the surface is shining pitchy-black, with a slight bronzy tint, becoming rufous-pitchy only on the extreme margins; the striæ are impunctate, the scutellar striole well developed; the interstices nearly plane, smooth, the 3rd with a puncture behind the middle. The antennæ are pitchy-black, with the base and apex rufous; the legs pitchy-red. The base of the abdomen in the ♂ has an oblong pubescent fovea. The anterior tarsi in the same sex have widely dilated triangular joints, the lateral angles in 2—4 being acute, and the 4th angularly emarginate. The middle tarsi are similar in form but much narrower.

*Tachycellus grandiceps*, n. sp.

*T. anchomenoïde* longior, capite crassiori. Elongatus, niger, nitidus; antennarum scapo, palpis pedibusque rufo-piceis; capite magno, thorace antice haud angustiori, ante oculos citius angustato, mandibulis apice crassis; thorace postice gradatim rotundato-angustato, angulis posticis rotundatis, foveolis sparsim punctatis; clytris thorace paulo latioribus, elongatis, apice oblique sinuatis, suprâ striatis.

Long. 3 lin. ♂ ♀.

Approaching *Platymetopus* in form and in the size and shape of the head. Same colours as *T. anchomenoïdes*, clytra with a slight brassy tinge, scarcely rufescent on the apical margins; lateral margins of the thorax rufescent. The antennæ are black, with the scape only red. The palpi are pitchy-red, with the long pointed apices pallid. Thorax punctured only in the basal foveæ. Elytra elongate, not dilated, deeply striated, third interstice with one puncture. The base of the abdomen, in the ♂,

has in the middle an oblong pubescent fovea. The anterior tarsi of the ♂ are triangularly dilated, but the lateral angles are blunter, and in the 4th joint produced into lobes.

*Bradycellus laticolor*, n. sp.

Flavo-testaceus, capite et elytris nigris, thorace rufo; antennis (articulis duobus basalibus rufis exceptis) nigris; thorace postice modice angustato, angulis posticis obtusis sed haud rotundatis, foveâ basali magnâ, punctatâ.

Long.  $2\frac{1}{2}$  lin. ♀.

Nagasaki. One specimen also taken, on the banks of the Yang-tsze, in China.

Similar in form to the *B. distinctus*, but head larger and thicker behind the eyes, which are embraced behind by an orbit. The palpi are tawny-testaceous. The thorax is shorter and broader than in *B. distinctus*, dilated and rounded almost immediately behind the anterior angles, then moderately narrowed (not sinuated to the distinct but obtuse hind angles); the basal fovea is large and deep, and coarsely punctured. The elytra are glossy black, sharply but simply striated, and without scutellar striae. The underside is reddish-testaceous, with the metasternum darker.

This may prove to be a *Tachycellus*, when the ♂ is known.

*Bradycellus fimbriatus*, n. sp.

Brevis, elongato-ovatus, fusco-piceus, clytris utrinque margine toto testaceo-rufo; thorace colore variabili, palpis pedibusque flavo-testaceis; thorace elytris angustiori, antice angustato, postice lateribus et angulis posticis rectis, basi sparsim grosse punctato.

$1\frac{2}{3}$ — $1\frac{3}{4}$  lin. ♂ ♀.

Nagasaki.

General form short, oblong-ovate, with the thorax not at all cordate, but narrowed in front and with nearly straight sides behind; hind angles rectangular, basal foveæ long and narrow, and the whole base sparingly but rather coarsely punctured. The colour is variable; but the disk of each elytron is always pitchy-black, leaving rufous margins which occupy one interstice at the suture and four at the sides and apex; the head and thorax are generally rusty-testaceous, with the disks piceous. The antennæ are short and thick for this genus, with joints 2—10 almost

moniliform, and the 11th oblong and stout; they are rufous in colour, darker than the palpi and legs, which are yellowish-testaceous. The head is similar in form to that of *B. harpalinus*. The elytra are punctulate-striate, the 5th—7th striæ very faintly impressed and the scutellar striae wanting. Beneath, the gula is remarkably large and convex, and the thorax and abdomen punctulate. The anterior edge of the prosternum is not margined; the middle of the basal segment of the abdomen has an elongate pubescent fovea.

In some respects this species agrees with *Tachycellus*, but the middle tarsi of the ♂ are decidedly simple and without squamæ on the soles. The terminal joint of the palpi is much longer than the penultimate, and the mentum has a distinct acute tooth.

*Trichotichnus longitarsis*, Morawitz, Beitr. Käferf. Ins. Jesso, p. 65.

Nagasaki; Kawachi; Hakodadi (Moraw.)

This insect has the general figure of *Bradycellus harpalinus*, but is of vastly greater size, being  $4\frac{1}{2}$  to 5 lines in length. The generic character resides chiefly in the absence of scales and hairs from the middle of the soles of the dilated tarsi of the ♂. Both anterior and middle tarsi are moderately dilated; the margins of the soles fringed with long hairs, the centres naked. The head and thorax are bright ferruginous-red, in the type, with the elytra pitchy-black or brown; but Mr. Lewis took examples which have the whole upper surface of the same piecous colour.

*Acupalpus inornatus*, n. sp.

Elongatus, fulvo-testaceus, antennarum basi, palpis pedibusque pallidioribus; oculis magnis; thorace postice modice angustato, angulis posticis valde obtusis; clytris iridescentibus, acute striatis.

Long.  $1\frac{3}{4}$  lin. ♀.

Nagasaki; two examples. Also in China; at Kiu-Kiang.

Less elongate than *A. consputus*, and differing in the very obtuse, almost rounded, hind angles of the thorax; the hind margin near the angles is reflexed, enclosing the broad shallow basal fovea, which is finely punctured. The eyes are still more convex than in *A. consputus*. The elytra are a shade browner in colour than the tawny-red

head and thorax, and have an iridescent gloss; the striae are strongly and sharply impressed, with the usual scutellar striae and interstitial puncture. The two basal joints of the antennae are yellow, the rest tawny-brown.

*Anoplogenus circumcinctus*.—*Megrammus circumcinctus*, Motsch., Etudes Entom. 1857, p. 26.

Osaka. Also in China; at Kiu-Kiang (Yang-tsze), Shanghai, Ningpo, and Foochow; apparently a common insect.

M. Morawitz appears not to admit *Anoplogenus* as distinct from *Stenolophus*. The structural differences are indeed very slight, but *Anoplogenus* may be known at once by the absence of the abbreviated scutellar striae.

*Stenolophus propinquus*, Morawitz, Bull. Ac. St. Petersburg.

1862, p. 261; id. Beitr. Käferf. Ins. Jesso, p. 80.—

*S. Japanus*, Motsch., Bull. Mosc. 1864, 3, p. 203.

I. Yesso. Mr. Lewis did not meet with this species.

*S. castaneipennis*, n. sp.

*S. vespertino* similis; differt tantum angulis posticis thoracis distincte marginatis. Elongato-oblongus, piceo-niger, nitidus, elytris rufo-castaneis, suturam versus saturatioribus; pedibus pallidis; antennarum scapo et palpis flavo-testaceis, his fusco-maculatis.

Long. 3 lin. ♂ ♀.

Nagasaki; three examples.

Very closely allied to the European *S. vespertinus*. The thorax is decidedly shorter, with more rounded basal margin and with the marginal rim more strongly raised round the hind angles.

*S. proximus*, Dej. Spéc. Gen. iv. p. 420.

Hiogo; Hakodadi (Morawitz); Shanghai.

Morawitz states that there is no difference between Yesso specimens and others from Southern Russia. I have not been able to obtain specimens of *proximus*, to make the comparison; but Mr. Lewis's specimens agree very well with Dejean's description. They differ only in their rather smaller size from the Chinese *S. iridicolor* (Redtenb.). A variety occurs which has entirely pale tawny-testaceous antennae (var. *fulvicornis*), the smaller specimens of which

are only 2 lines long. Intermediate examples have the two basal and several apical joints only tawny. I can see no other difference.

*S. chaldeus*, n. sp.

Suprà viridi-aeneus, antennis basi, palpis, thoracis et elytrorum marginibus pedibusque flavo-testaceis; oculis valde convexis; thorace regulariter rotundato, foveis minute punctulatis.

Long.  $2\frac{1}{4}$ — $2\frac{1}{2}$  lin. ♂ ♀.

One example, Hiogo. Taken by Mr. Lewis also at Kiu-Kiang, on the Yang-tsze, in China.

Similar in general form to *S. vespertinus*, but distinguished from all the allied species by its prominent eyes, rounded (almost circular) thorax and brassy-green colour. The antennæ are brown, except the two yellowish basal joints. The thoracic foveæ are shallow and covered with a fine punctuation. The elytral interstices are plane; the margins and the apex yellowish. Underneath pitchy.

*S. quinque-pustulatus*,—*Badister*, id. Wiedm. Zool. Mag. ii., i., p. 58.

Nagasaki. Also at Kiu-Kiang, on the Yang-tsze; Cochin China; Bengal.

I have not seen specimens from the locality whence Wiedmann obtained the species, but as Japanese specimens do not differ from others from China and Saigon, I believe the species is the same. The pale spots of the elytra are somewhat variable; the posterior discal one being absent in many cases.

*Platymetopus corrosus*, n. sp.

*P. vestito* similis. Elongato-oblongus, cupreo-niger obscurus, subopacus, pilis brevibus fulvis dense vestitus, pedibus palpisque concoloribus, antennis basi rufo-testaceis; capite (labro incluso) crebre punctato; thorace grosse punctato-rugoso et punctulato, angulis posticis obtusis; elytris crebre punctulatis, punctato-striatis, interstitiis 3io—5to et 7mo paulo elevatis.

Long.  $3\frac{1}{2}$ —4 lin. ♂ ♀.

Hiogo; Nagasaki. Also on the Yang-tsze and at Foo-chow, in China.

Resembles *P. vestitus*, a Senegal species, but it seems most closely allied to *P. Thunbergi* (Quensel), a species



I do not know, and which has been variously recorded as from India and the Cape of Good Hope. The general colour is a dull coppery, and the whole upper surface very densely clothed with short tawny hairs. The palpi are brassy-black, except the extreme points, which are pallid. The antennæ are black or dark brown, with the 1st or the 1st and 2nd joints reddish. The thorax is transverse-quadrate, moderately widened to one-third the length, then slightly narrowed posteriorly, forming obtuse hind angles, the apices of which project a little; the surface is as if corroded, impressed with large irregularly confluent punctures, forming here and there coarse rugæ, and all the interstices covered with a fine punctuation. The elytra are deeply sinuate at the tip; the striæ are distinctly punctured, and the 3rd, 5th and 7th interstices raised.

The paraglossæ are large and connate with the ligula, surrounding the apex and meeting above, as in the *Lebiadæ*. The anterior and middle tarsi of the ♂ have four joints moderately dilated, the soles clothed with small scales arranged in two rows.

It is not stated in Gemminger and Harold's Catalogue on what authority *Platymetopus Thunbergi* of Dejean is placed as a synonym of *Dioryche torta* of Macleay's *Annulosa Javanica* and the universally-used generic name of Dejean's changed, in consequence, for the prior name of Macleay. This very unwise change and confusion of nomenclature are founded on a complication of mistakes which could not possibly have been committed if the original descriptions had been consulted. There is not one point of agreement between the descriptions of *Dioryche torta* and *Platymetopus Thunbergi*. The generic characters given with *Dioryche* are vague in the extreme and teach nothing, so that the name would have no right to supplant another well-defined one in general use, even if it were synonymous, which is not clear in the present case, as *D. torta* probably does not belong to Dejean's genus. Dr. Gemminger (to whose superior eagerness to change established names on any sort of excuse we owe the "Catalogue" of *Carabidæ*) also separates the *P. Thunbergi* of Dejean from that of Quensel (in Schönh. Syn.). This appears another unwarrantable change. Dejean received his specimen from Schönherr himself, and his description agrees exceedingly well with that of Quensel. There appears simply to have been some error as to

locality. Quensel gives Cape of Good Hope and Dejean (on the authority of Schönherr) "Indes Orientales."

Group 4. *Tripalmati*.

Subfam. ANCHOMENINÆ.

*Pristonychus æneolus*, n. sp.

Elongatus, gracillimus, piceo-niger, clytris ænescentibus lucidis; palpis, antennis, tibiis et tarsis piceo-rufis; capite elongato, oculis vix prominulis; thorace elongato, angusto, postice gradatim angustato, lateribus explanatis reflexis, angulis posticis apice rotundatis; clytris profunde punctulato-striatis; tarsis infra dense hirsutis, supra glabris, lateribus sulcatis, unguiculis fortiter pectinatis.

Long.  $6\frac{1}{2}$ —7 lin. ♂ ♀.

Kawachi; in damp woods.

A long and slender but convex species, with corresponding long antennæ and legs; pitchy-black, with dark æneous clytra. The antennæ and palpi are dark tawny-red. The thorax differs in form from all the European species. It is considerably longer than broad and appears therefore very long and narrow; the anterior angles dip downwards and are inconspicuous, the sides are broadly explanate and up-turned and the hind angles are rounded at their apices; the thorax is a little wider at one-third its length, thence very gradually narrowing to the base; the middle of the base is broadly emarginate and there are a few shallow punctures in the broad basal foveæ. The striae of the elytra are very deep and punctulate. The soles of all the tarsi are more densely clothed with hairs in both sexes than in other species; the upper side of the tarsi is quite glabrous and the sides grooved.

*Dolichus flavicornis*, Fab. et auctor.

Common in Japan and in Northern China.

*D. callitheres*, n. sp.

*D. flavicorni* multo minor, gracilior. Vix convexus, piceo-niger; antennis, palpis, pedibusque piceo-fulvis; thorace quadrato, lateribus antice vix rotundato postice gradatim angustato, angulis posticis obtusis, basi utrinque juxta angulum oblique truncato, supra omnino impunctato; clytris apice nullomodo sinuatis, supra subopacis, acute

striatis, interstitio 3io bipunctato; tarsis omnibus utrinque sulcatis.

Long. 6 lin. ♀

Hiogo; one example.

Agrees with *Dolichus* in facies and in the slender cylindrical terminal joints of the palpi; but differs in the anterior tarsi (as well as the others) being deeply sulcated on each side. The head is rather more slender and the eyes less prominent. The thorax is wholly impunctate and the hind angles are distinct although obtuse; the lateral edges are not rufous. The elytra are not sinuate at their apices and the striae are simple; their surface is not so opaque, but has a silky gloss.

*Crepidactyla nitida*, Motsch. Etudes Entom. 1861, p. 5.

Kawachi; Yesso.

*Pristodactyla cyclodera*, n. sp.

Magna, robusta, nigra, nitida; palpis, antennis, tibiis et tarsis piceo-rufis; thorace convexo, ovato, lateribus regulariter rotundato; elytris oblongo-ovatis, fortiter striatis.

Long.  $6\frac{1}{2}$  lin. ♂ ♀.

Nagasaki; also at Foochow, China.

Closely resembling *Crepidactyla nitida*, but differing in the generic character of labial palpi not securiform. The head is small. The thorax large and ovate, with sides regularly rounded, so that the greatest width is in the middle; the anterior angles are distinct, but the hind angles are rounded off; the reflexed lateral margins are rufo-piceous, the basal foveae, like the rest of the surface, impunctate. The sides of the middle and posterior tarsi are grooved; the claws have 4—5 fine denticulations. The labial palpi in both sexes are only slightly dilated towards the apex and truncated; this is the only character I can find distinguishing the genus from *Crepidactyla* and *Taphria*.

*Pristodactyla dulcigrada*, n. sp.

Elongata, gracilis, parum convexa, nigro-picea; antennis, palpis, pedibus, margineque thoracis piceo-fulvis; thorace quadrato, lateribus paululum regulariter arcuatis, angulis posticis obtusissimis, suprâ impunctato; elytris apice singulatim acute rotundatis, suprâ fortiter striatis, nitidis, interstitio 3io bipunctato; tarsis intermediis et posticis utrinque sulcatis.

Long.  $4\frac{1}{4}$ — $4\frac{1}{2}$  lin. ♂ ♀

Hiogo; Nagasaki.

The labial palpi are very slightly dilated from base to apex and truncated, not much more so than in *Dolichus*; the species would therefore fit very well in the genus *Dolichus*; but this would entail the incorporation in the same genus of all the North American species known to me (*P. impunctata*, *dubia*, *advena* and *Mexicana*). The present species has shining and not opaque clytra, and the thorax is about as long as broad, with very slightly arcuated sides, the greatest width being a little before the middle; the hind angles are almost completely rounded off. The edges of the thorax are reddish, and the apex of each clytron is wedge-shaped.

*Pristodactyla arcuaticollis*, Mots. Etudes Entom. 1860, p. 7.

A broader species than the last, with broader and more strongly rounded thorax. The labial palpi are similarly slightly dilated and sharply truncated; the middle and posterior tarsi sulcated.

*Taphria congrua*, Morawitz, Bull. Ac. St. Petersb. 1863, p. 249.

Nagasaki (one example). Bureja Mts., Amur. (Moraw.)

Closely allied to *T. nivalis*; a little larger, with longer and less rounded thorax.

*Taphria crassipalpis*, n. sp.

Elongata, robusta, nigra nitida; palpis, labro, antennis, pedibusque piceo-rufis; fronte lateribus grosse punctato; thorace quadrato-cordato, angulis posticis distinctis obtusis, basi sparsim grosse punctato; clytris sulcato-striatis; pedibus brevibus; tarsis haud sulcatis; palpis labialibus (♀) articulo ultimo grossissime inflato-securiformi.

Long.  $5\frac{1}{2}$  lin. ♀.

Hiogo; one example.

According to the thick, widely-securiform labial palpi, this species would belong to *Crepidactyla*, but the shorter legs and ungrooved tarsal joints bring it nearer *Taphria*, whilst the subcordate thorax removes it equally from both genera as at present defined. The head is rather larger and the neck thicker than in the allied genera; the sides of the forehead have a few confluent large punctures, or rather coarse irregular rugæ. The terminal joint of the

maxillary palpi is nearly cylindrical and as long as the preceding. The thorax is rather elongate, its sides rounded anteriorly; moderately narrowed posteriorly without distinct sinuation; the hind angles are distinct although obtuse, and the sides of the base cut obliquely on each side towards the angle; the basal foveæ are long, broad, and deep.

*Colpodes atricomes*, n. sp.

Niger, nitidus; antennis, palpis, tibiis et tarsis piceo-rufis; thorace quadrato postice plusquam antice angustato, lateribus late æqualiter explanatis, piceis, angulis posticis rotundatis; elytris amplis, apice utrinque bisinuatis, angulo suturali spinoso; tarsis intermediis et posticis suprâ fortiter bisulcatis, articulis 1—4 subtus dense breviter pilosis, articulo 4to anticorum et intermediorum bilobato, posticorum emarginato, angulo exteriori paulo elongato.

Long. 6 lin. ♂ ♀.

Hiogo; several examples.

Resembles closely the black *Anchomeni* of the *Limodromus* group. The palpi are long, the terminal joint of the maxillaries much shorter than the preceding. The antennæ are long and slender, 3rd and 4th joints nearly equal. The head is small and narrowed, in equal manner, anteriorly to the labrum and posteriorly to the neck. The thorax is about half the width of the elytra; widely and equally margined, rather strongly rounded on the sides; widest before the middle, where it is by a half wider than the length; the sides are strongly upturned, leaving a wide groove between the edges and the disk; disk faintly wrinkled. The elytra are ample and at the tip obliquely bisinuate, the produced spine at the suture causing a second short sinuation besides the usual longer external one; the surface is strongly striated, the striae faintly punctulated.

*C. splendens*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 324; id. Beitr. p. 40, t. 1, f. 19.

Nagasaki; Hiogo; Yokohama; Yesso.

A large species with brilliant brassy elytra.

*C. lampros*, n. sp.

Testaceo-rufus, capite et thoracis disco nigro-castaneis; elytris (marginibus lateralibus rufis exceptis) viridi-auratis

nitidissimis; capite collo elongato, oculis vix prominulis; thorace valde transverso, lateribus latissime explanatis et fortiter rotundatis; elytris oblongo-ovatis, fortiter striatis, apice oblique leviter sinuatis; tarsis intermediis et posticis utrinque sulcatis, articulo 4to omnium bilobato, lobo exteriori longiori, posticis multo longiori et lobo interiori obsoleto.

Long.  $4\frac{1}{2}$ —5 lin. ♂ ♀.

Hio; abundant.

Allied to *C. Lafertei* (Montr.) of New Caledonia; but the thorax still wider and more strongly rounded in the middle; the hind angles are rounded and scarcely perceptible; the flattened sides are extremely wide and nearly equal from base to apex; the widest part is a little before the middle, the posterior narrowing being a little more gradual than the anterior. The legs and underside are uniform tawny-reddish. The head is long and narrow, especially behind, and the eyes little prominent. The exterior lobe of 4th joint in all the tarsi is elongated, but most so on the hind feet, where the 4th joint is truly unilobular.

*C. modestior*, n. sp.

*C. lampros* proxime affinis, at colore multo obscurior, etc. Testaceo-rufus, capite et thoracisque disco nigro-castaneis; elytris (marginibus lateralibus rufis exceptis) olivaceo-eneis; capite breviori, oculis exstantibus; thorace transverso, lateribus latissime explanatis et minus fortiter rotundatis, postice quàm antice paulo longius angustatis, angulis posticis distinctis, obtusis; elytris apice oblique sinuatis, suprâ fortiter striatis, striis fundo crenatis.

Long.  $3\frac{1}{2}$ —4 lin. ♂ ♀.

Nagasaki.

The shorter head, especially behind, and the prominent eyes, give this species an appearance very distinct from *C. lampros*; it is very closely allied to *lampros*, as proved by the 4th tarsal joints, which are very similar in shape in all the feet; the grooves on the hinder tarsi are, however, different, being quite lateral in *modestior* and dorsal in *lampros*. The thorax has similar wide explanated margins, and the greatest width is a little before the middle, but it is narrowed rather less in front and forms behind much more distinct angles. The elytra are dark brassy-green, and not glittering golden-green, as in *lampros*.



*C. sylphis*, n. sp.

Gracilis, elongatus, testaceo-rufus; capite suprâ, thoracisque disco nigro-castaneis, elytris (marginibus lateralibus rufis exceptis) aurato-æneis; capite elongato; thorace angusto, quadrato-cordato, postice sinuatim angustato, angulis posticis rectis, lateribus modice late explanatis, foveisque basalibus punctatis; elytris elongato-obovatis (versus basin angustatis), apice oblique sinuatis, versus suturam singulatim rotundatis, suprâ fortiter punctulato-striatis; tarsis anticis et intermediis articulo 4to breviter bilobato, lobo exteriori longiori, posticis æqualiter emarginato.

Long. 5 lin. ♀.

Hiogo; two examples.

An elegant species, distinguished by the elytra being slightly dilated posteriorly. The head is long; gradually elongated posteriorly. The thorax is narrow, although it has an explanated border of considerable width: it is moderately rounded anteriorly, and, behind, narrows moderately (with sinuation) to the rectangular hind angles; the whole surface, except the rufous explanated margins, is glossy dark castaneous. The shoulders of the elytra are distinct, though rounded; the striae are strongly impressed and distinctly punctulated. The sulci of the tarsi are lateral and distinctly marked only on the posterior pair.

*C. Japonicus*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 324; id. Beitr. p. 41; *Tanystola Japonica*, Motsch. Etudes Entom. 1860, p. 9?

Hiogo; Yesso; China.

Similar to *C. lampros*; but rather larger and much duller in colour; the thorax narrower and ovate, with narrow explanate margins. The anterior tarsi alone have the 4th joint bilobed and but briefly; in the intermediate it is deeply emarginated, with the exterior angle a little more produced than the inner one; in the hind tarsi it is simply emarginated, without perceptible difference in length of the two sides. The species therefore approaches *Anchomenus*. The hind tarsi are grooved on the sides and not on the upper surface.

*Dicranoncus femoralis*, Chaudoir, Bull. Mosc. 1850, ii. p. 393; *Loxocrepis caelestinus*, Motsch. Bull. Mosc. 1864, iv. p. 310.

Nagasaki. Also Birmah and Northern India.

Distinguished from *Colpodes* by the tarsal claws having a long tooth or spine at their base. I can find no difference between Japanese specimens and others from Northern India (from the late Judge Benson's collection) with which I have compared them. Motschulsky's description suits as far as it goes, but he overlooked the structure of the claws and placed it in the wrong genus.

*Anchomenus (Limodromus) protensus*.—*Dyscolus protensus*, Morawitz, Beitr. Käferf. Ins. Jesso, p. 42.

Hiogo; Nagasaki; Yesso (Moraw.) Also China.

Very much resembles *Colpodes atricomes*, but the 4th tarsal joint is triangular and barely emarginated even in the anterior feet, showing that it does not belong to the same genus. The form of the head and thorax is very different and approximates that of *A. (Limodromus) angusticollis*, from which it is distinguished by its much broader and shorter thorax, with obtuse and strongly reflexed hind angles, and by the much greater width and relative size of the elytra.

The species belonging to Eschscholtz's and Motschulsky's genus *Limodromus* differ from the *Anchomeni* not only in facies, but in the short and broad ligula scarcely visible above the root of the labial palpi; the same organ being narrow and porrect in *Anchomenus*. *Platynus* seems to me also a very good group, and I cannot but think it was a retrograde step in the science, to fuse these all into one genus with the name first of *Anchomenus* (held for some years) and then of *Platynus*.

*A. (Limodromus) magnus*, n. sp.

Elongatus vix convexus, niger, nitidus; antennis, palpis, tibiis et tarsis piceis; capite postice abrupte angustato; thorace breviter quadrato, lateribus explanatis, rufo-piceis, paulo rotundatis, postice paulo (vix sinuatim) angustato, angulis posticis obtusis reflexis, foveis basalibus punctato-rugatis; elytris valde elongatis, latis, oblongis, apice valde sinuatis, suprâ fortiter striatis.

Long. 7 lin. ♂ ♀.

Hiogo; Nagasaki. Also at Kiu-Kiang on the Yangtsze and at Shanghai, in China; apparently common.

Distinguished from *A. protensus* by the more elongate thorax, more gradually narrowed behind and with pitchy-rufous explanated margins. The elytra too are very much longer. The thorax is less than one half the width of the elytra, a little broader than long, with rather wide explanated margins, which are turned up, especially at the obtuse hind angles, and are more or less rufous-pitchy in colour. The elytra are of great relative dimensions, more than three times the length of the thorax. The legs and tarsi are as in *protensus* and *angusticollis*.

*Anchomenus leucopus*, n. sp.

Gracilis, niger parum nitidus; antennarum scapo palpisque rufo-testaceis, pedibus albo-testaceis; thorace elongato-quadrato-cordato, angulis anticis acutis, posticis rectis; elytris oblongo-ovatis, fortiter punctato-striatis, interstitio 3io tripunctato.

Long. 4 lin. ♂.

Tango; two examples.

Allied to *A. prasinus* and *extensicollis*; dull black above and beneath, contrasting with the white legs. The antennæ are very elongate, dull black, except the basal joint which is tawny-reddish. The palpi are long and slender and of a redder testaceous tint than the legs. The head is more narrowed behind the eyes than in *A. prasinus*. The thorax is moderately elongated, with acute anterior angles, sides softly rounded anteriorly, sinuate-angustate posteriorly and with almost acute hind angles; the surface is strongly wrinkled transversely, the wrinkles mingled with punctures which are much denser on each side of the base. The elytra are less ovate than in *A. prasinus*, the striæ very deep and sharp, with a very regular punctuation; the third interstice has in its middle three punctures.

*A. (Agonum) daimio*, n. sp.

Species elegantissima. Elongato-ovatus, gracilis, flavo-testaceus, capite vittâque latâ suturali viridi-æneis.

Long.  $3\frac{1}{2}$  lin. ♂ ♀.

Yokohama; also in China, at Foochow.

Similar in form to *A. puellus*. Head above shining brassy-green, smooth; parts of the mouth and scape testaceous-tawny, the rest of the antennæ being black. Thorax

slender, ovate; anterior angles distinct, rectangular; posterior rounded; surface smooth and shining, testaceous-red. Elytra elliptical, sharply but finely punctate-striate; testaceous-red, with a broad brassy-green sutural vitta reaching to the 4th stria and extending from the base very nearly to the apex, where it ends in a point on the suture; the 3rd interstice has three large punctures; the shoulders are rounded, but prominent and produced forward (the marginal fold being strongly incurved), and the apex is strongly sinuate. The underside of the head is black, the rest of the under-surface and legs testaceous tawny-yellow.

*A. (Agonum) chalcomus*, n. sp.

*A. scintillanti* (Bohem.) proxime affinis, at differt corpore subtus omnino nigro-piceo. *A. parumpunctato* similis sed gracilior, thoraceque angustiori. Subtus nigro-piceus, suprà capite et thorace viridi-æneis, elytris cupreis, antennis palpisque piceis, pedibus piceo-rufis; thorace parvo subquadrato, angulis anticis acutis, posticis rotundatis, margine anguste explanato, reflexo, rufescenti, postice angustato paululum sinuato, suprà impunctato; elytris acute striatis, interstitio 3<sup>io</sup>, 4<sup>to</sup> vel 5<sup>to</sup> punctato.

Long.  $3\frac{1}{2}$  lin. ♂ ♀.

Hiogo; Nagasaki.

Very closely allied to the common Chinese *A. scintillans* (Bohem.), from which no difference is perceptible, except the abdomen being pitchy-black (like the rest of the under-surface) instead of testaceous. The antennæ are rather darker pitchy-red, and the surface of the thorax smoother, with narrower and much less pallid explanated lateral margins. Both species are also very closely allied to the Siberian *A. bicolor* (Dej.) which has paler, livid-brown and only slightly æneous elytra, and rather longer thorax. The colour of the elytra in *A. chalcomus* is always moderately bright cupreous, similar to *A. parumpunctatus*. *A. fallax* (Moraw.) is another allied species, differing in the broader thorax, not much narrower at the base than the elytra.

*A. (Agonum) impressus*, Panz. et auctor.; Morawitz,  
Beitr. p. 43.

Hakodadi.

*A. (Agonum) quadripunctatus*, De Geer; Moraw. l. c.  
p. 43.

Yesso.

I have not seen Japanese specimens of either of these species.

*Orthotrichus cymindoïdes*, Dej. Spéc. Gen. v. p. 371.

Hiogo.

One example, in no respect differing from Egyptian specimens.

### Subfam. TRECHICHINÆ.

#### *Trechichus Japonicus*, n. sp.

Flavo-testaceus, capite suprâ et infrâ (partibus oris exceptis) nigro, elytris, præcipue prope apicem, leviter infuscatis, indistincte striatis, interstitio 3<sup>io</sup> tripunctato; thorace prope angulos anticos levissime rotundato, deinde subrecte usque ad basin angustato, angulis posticis obtusis, margine laterali anguste fusco.

Long.  $1\frac{1}{3}$ — $1\frac{1}{2}$  lin. ♂ ♀.

Closely allied to *T. finicola* (Wollast.) from the Cape Verde Islands. It is a little larger, less glossy, sides of thorax distinctly less rounded, and apex of the elytra less distinctly black. As in other species of *Trechichus*, and to a less degree *Mizotrechus*, the 8th stria is more sharply impressed than the rest, flexuous in the middle and led round the apex, at some distance from the margin, to the end of the suture, causing the discal surface of the elytra to form a slight fold over the impressed line.

This species has a tooth in the emargination of the mentum, and therefore differs from the definition of *Trechichus* given by Leconte after Zimmerman. I can confirm the statement of these authors that the mentum is toothless, in so far as I failed to distinguish a tooth in a specimen of *T. umbripennis* showed me by Dr. Leconte. It is so difficult, however, to be sure, without dissecting a specimen, that I think it unadvisable to form a new genus on this point of difference, until the North American species have been thoroughly re-examined.

The present species, on dissection, proves to have a narrow horny ligula surmounted by two setæ, with paraglossæ adherent to the upper angles, and there obliquely truncated upwards and outwards, without being longer than the ligula; a very similar formation exists in the genus

*Lelis*, subfam. Coptoderinæ. The anterior tarsi of the ♂ have four very slightly dilated ovate joints; and as far as I can observe, under the compound microscope, all four joints are furnished with membranous scales underneath. As, however, the closely allied genus *Mizotrechus* offers only three dilated joints, with scaly palms, in the ♂ (more triangular than in *Trechichus*), I am inclined to doubt the accuracy of the observation with regard to *Trechichus*, the minute size and hairiness of the tarsi rendering it extremely difficult.

With regard to its other characters, the lobes of the mentum are prolonged at the apex into fine points; the labrum is quadrate and entire at the apex; the mandibles and maxillæ are long and slender, the last joint of the palpi tapering to a point, as in *Trechus*. The affinities of the genus, together with *Mizotrechus*, lean certainly towards *Diploharpus*, a genus of *Anchomeninæ*, but the *adherent paraglossæ* remove it from the *Anchomeninæ*; and as the elytra are not truncated, but broadly rounded, it cannot be placed in the *Coptoderinæ* subfamily of *Truncatipennes*, to which it is allied in many respects. Baron Chaudoir pointed out, long ago, the relationship between *Diploharpus* and *Stenognathus*. There remains no alternative, therefore, but to place the two genera in a separate subfamily, which I think forms an additional link, to others already known, between the *Anchomeninæ* and the *Truncatipennes*.

The genus *Trechichus* is widely distributed. I have seen specimens from North America, the Cape Verde Islands, Penang and Australia, besides Japan, belonging to very closely-allied species.

*Pentoplogenus exiguus*, Morawitz, Beitr. p. 25, t. 1, f. 10.

Hakodadi; "one example, female."

A curious little insect ( $3\frac{1}{4}$  millim.), resembling, according to Morawitz, *Trechichus* (Lec.). The elytra are not truncated, but rounded; therefore it cannot belong to the *Lebiinæ*, where the author places it. The terminal joint of the palpi is conical, as in *Trechichus*; but the bilobed labrum effectively distinguishes the genus. I have not seen anything from Japan agreeing with this description, but have no doubt that it belongs to the subfam. *Trechichinæ*. It may be remarked that a species of the allied genus *Mizotrechus*, viz., *M. lævigatus*, has the labrum somewhat deeply notched at its apex.



## Subfam. ABACETINÆ.

*Abacetus leucotelus*, n. sp.

*A. convexiusculo* (Chaud.) proxime affinis, at differt antennarum articulis 9—11 albo-testaceis. Angustus, convexus, suprâ olivaceo-æneus nitidus, palpis pedibusque flavo-testaceis, antennis articulis 1—3 ferrugineis, 4—8 nigris, 9—11 albo vel flavo-testaceis; thorace antice et medio fortiter rotundato, prope basin constricto, angulis posticis productis acutis, medio basi grosse sparsim punctato; elytris profunde striatis, interstitiis subplanis, 3<sup>io</sup> unipunctato, margine postico rufescenti.

Long.  $2\frac{1}{4}$  lin.

Nagasaki; one example. A second was taken by Mr. Lewis on the Yang-tsze Kiang.

By its narrowish, convex figure, and bright brassy colour, resembling a *Dyschirius*. The species is easily recognizable from the allied forms *A. convexiusculus*, *antiquus*, &c. by the whitish apical joints of the antennæ.

## Subfam. DRIMOSTOMINÆ.

*Stomonaxus striaticollis*, Dej. Spéc. Gen. v. 747; Chaudoir, Annales Soc. Ent. Belg. tom. xv. 1872.

Nagasaki; abundant, under stones in moist places. Also taken by Mr. Lewis abundantly in China.

*St. platynotus*, n. sp.

Oblongus, latissimus, niger, nitidus; partibus oris, antennis, pedibusque piceo-rufis; antennis articulis 4—11 minus dilatatis, cylindrico-compressis; thorace latissimo, apud basin quàm elytris haud angustiori, antice paulo angustato, limbo obscure piceo-rufescenti, sulcis basalibus angustis; elytris sulcato-striatis.

Long. 4 lin. ♀.

Nagasaki; one example.

Differs from the other species of the genus in its broad *Oödes*-like shape, and in the thorax not being at all narrowed behind; also in the unthickened antennal joints. It has, however, the other chief characters of *Stomonaxus*. The anterior tarsi of the ♀ have their 1st and 2nd joints produced at their inner apex into a long tooth; the middle and hind tarsi are slender, smooth above and grooved only on the sides. The anterior tibiæ are dilated at the apex, and their rounded outer edge furnished with a row of extremely strong spines.

## Subfam. TRIGONOTOMINÆ.

*Trigonotoma Lewisii*, n. sp.

Elongata, gracilis, convexa; capite thoraceque supra læte aureo-cupreis nitidis, elytris cupreo-nigris, iridescentibus; antennis, pedibus corporeque subtus nigro-piceis; thorace rotundato-cordato, angulis posticis valde obtusis; elytris fortiter punctato-sulcatis.

Long. 8 lin. ♂.

Hiogo; Nagasaki, on Mount Mitsyama.

Differs from the Chinese *T. Dohrnii* by its smaller size and narrower form, and by the deeply sulcate elytra. Head as in that species; labrum semicircularly emarginated; palpi piccous-tawny; labials in the ♀ broadly triangular; surface brilliant coppery. Thorax of the same brilliant copper colour as the head, much less quadrate than in *T. Dohrnii*; sides very strongly rounded, more narrowed behind than in front, with the hind angles obtuse, almost rounded; surface almost smooth; base without punctures, except faint indications in the broad foveæ. Elytra shining coppery-black, with iridescent reflections; striae forming broad and deep sulci from base to apex; strongly crenulate-punctate. The antennæ are strongly geniculated; black, rufescent towards the tips. The sides of the prosterna and metasterna are very coarsely punctured.

*Triplogenius ingens*, Morawitz (*Omaseus*), Beitr. Käferf. Ins. Jesso, p. 54; Chaudoir, Ann. Soc. Ent. Belg. t. xi. p. 154; *Omaseus magnus*, Motsch. Etud. Entom. 1860, p. 5.

Hiogo; Nagasaki, abundant. Also China, apparently common.

*Tr. cuprescens*.

*Trigonognatha cuprescens*, Motsch. Etud. Entom. 1857, p. 26.

Simoda.

Mr. Lewis did not meet with this species, in which the thorax and elytra are described as cupreous, and the striae of the elytra as deep and impunctate.

## Subfam. PTEROSTICHINÆ.

*Pacilus planicollis*, Motsch. Etud. Entom. 1860, p. 5;  
*P. cupreus*, L., Moraw. Beitr. p. 44 (?).

Nagasaki; Awomori.

The few Japanese specimens I have seen all differ from

*P. cupreus* in the longer thorax, the sides of which are less rounded, and fall less obliquely to the posterior angle, thus causing a rather broader postero-lateral margin. The basal foveæ are in the same position as in *P. cupreus*.

*P. lepidus*, Fab. et auctor.

Hakodadi (Morawitz).

Mr. Lewis's collection does not contain this species.

*Pterostichus (Lagarus) sulcitaris*, Morawitz, Bull. Ac. St. Petersb. v. 1863, 250; id. Beitr. Käferf. Ins. Jesso, p. 46.

Hakodadi. Also coast of Manchuria.

Mr. Lewis did not meet with this species, distinguished by its smooth thorax, with a sharply-marked, linear, basal fovea, like the *Abaceti*. It is curious that the description almost exactly suits the North American *Pt. (Lagarus) erythropus*, Dej.

*Pt. (Lagarus) microcephalus*, Motsch. Etud. Entom. 1860, p. 6; *Pt. nimbatus*, Moraw. Bull. Ac. St. Petersb. v. 1863, 325; id. Beitr. p. 48.

Hiogo; Nagasaki, abundant.

The prosternal process is margined at the apex, as in the typical *Lagari*; but the palpi are decidedly truncated in the ♂, less so in the ♀.

*Pt. (Lagarus) procephalus*, n. sp.

Oblongus, nigro-nitidus, palpis testaceo-rufis, antennis pedibusque picco-rufis; capite elongato, oculis vix prominulis; thorace longo, lateribus æqualiter arcuatis, basi utrinque foveis duabus elongatis profundis punctatis, angulis posticis obtusis sed dentatis; elytris iridescentibus, fortiter striatis, striis crenulatis; interstitiis subplanis, 3<sup>io</sup> unipunctato; corpore subtus lateribus grosse punctato.

Long. 4 lin. ♂ ♀.

Nagasaki; abundant.

A species distinguished by its rather long head and scarcely prominent eyes. The anterior angles of the thorax are acute, but not produced, as in *Pt. microcephalus*; the sides are regularly rounded, and the posterior angles would be rounded off, were it not for a small projecting tooth. There is a very short scutellar stria.

*Pt. (Lagarus) subæneus*, Motsch. Etud. Entom. 1860, p. 6 (*Orthomus*); *Lagarus aberrans*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 251; id. Beitr. p. 49.

Iliogo; Nagasaki, abundant; Hakodadi. Also Eastern Siberia.

Motschulsky's description being recognizable, it is desirable not to displace his name, as was done by Morawitz. Although having the *Oödes*-like form of *Orthomus*, it wants the transverse sulci of the ventral segments which distinguish that genus.

*Pt. (Argutor) neglectus*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 253; id. Beitr. p. 51.

Hakodadi. Also Eastern Siberia.

Mr. Lewis did not meet with this species, of which I have at hand two examples from Eastern Siberia.

*Pt. (Argutor) longinquus*, n. sp.

Elongatus, parallelipipedus, picco-niger, nitidus; thorace lateribus rotundatis, angulis posticis obtusis basi utrinque crebre punctato, foveâque angustâ abbreviatâ; elytris striatis, interstitiis latis planis, 3<sup>io</sup> unipunctato.

Long.  $3\frac{1}{2}$  lin. ♂ ♀.

Iliogo; Nagasaki. Also Kiu-Kiang, on the Yang-tsze.

Allied to *Pt. (Argutor) neglectus*; form of thorax similar, having rounded sides, narrowed rather more behind than in front, and with obtuse, almost rounded, hind angles. But it differs in the striæ of the elytra being fine and scarcely punctulated, with flat interstices, bearing only one puncture on the 3rd. The scutellar stria is always present and of considerable length. The antennæ, palpi and legs are pitchy, the last named only inclined to pitchy-red.

*Pt. (Lyperus) prolongatus*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 251; var. *fuliginæus*, id. loc. cit. p. 325.

Hakodadi; E. Siberia.

Mr. Lewis's collection does not contain this species, which has rounded hind angles to the thorax.

*Pt. (Lyperus) Noguchii*, n. sp.

*Pt. elongato* staturâ simillimus, at differt thoracis lateribus ante angulum posticum sinuato angulis fere acutis.

*Nigerrimus*, nitidus, antennis apice, palpis tarsisque piceo-rufis; thorace cordato ut in *Pt. elongato*, utrinque foveâ latâ rugoso-punctatâ, plicâ laterali, cum margine haud connatâ.

Long.  $6\frac{1}{2}$ —7 lin. ♂ ♀.

Nagasaki. Also at Kiu-Kiang, on the Yang-tsze. Many examples.

So closely allied to the South European *Pt. elongatus*, that the differences in the form of the thorax seem to be the only distinguishing character. The general form is moderately elongate and parallel; the head precisely similar. In the thorax the size and lateral rounding is the same; but the anal angle is strongly salient and sharp at the tip, causing a sinuation before it of the lateral margin; with this is associated a peculiarity in the fold which bounds the large thoracic basal foveæ; instead of blending with the lateral rim, it continues separate to the base. The elytra are punctate-striate.

*Pt. (Omasus) fortis*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 252.

Kawachi; Hiogo. Also south coast of Manchuria.

Allied to the European *Pt. niger*, and still nearer to the Siberian *Pt. Eschscholtzii*.

*Pt. (Omasus) rotundangulus*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 252; id. Beitr. p. 53.

Hiogo. Also Eastern Siberia, whence I have many examples.

Allied to *Pt. anthracinus*.

*Pt. (Omasus) thorectes*, n. sp.

Subellipticus, convexus, nigro-piceus; palpis, antennis pedibusque rufo-piceis; thorace magno, lateribus arcuatis, angulis anticis productis acutis, posticis obtusis sed apice denticulatis, foveis bascos utrinque grosse punctatis, bi-striatis, plicâque laterali a margine separatâ; elytris oblongo-ovatis, fortiter punctulato-striatis, sine striolâ scutellari, interstitio 3<sup>io</sup> bipunctato; subtus lateribus grosse punctato. ♂ segmento ultimo ventrali medio concavo, laevi.

Long.  $3\frac{1}{2}$ — $4\frac{1}{2}$  lin. ♂ ♀.

Of shorter and more elliptical form than the typical *Omasi*; thorax equal in length to two-thirds of the elytra; sides arcuated, a little more narrowed behind than in

front. Head as in *Omaseus* and *Steropus*, with thick neck and prominent eyes, punctured above, most distinctly so on the sides. The anterior angles of the thorax are produced, the hind obtuse, but with a dentiform projection; the basal fovea large, deep, bistriated and punctured; externally a fold runs parallel to the lateral margin and reaches the base. Elytra not wider than the thorax; narrowed and sharply rounded at apex. Palpi stout; terminal joints rather ovoid-cylindrical, but sharply truncated. Prosternal process margined. Metasternal epimera about as broad as long.

*Pt. (Omaseus) Japonicus*, Motsch. Etud. Entom.  
1860, p. 6.

I have seen no specimens to which Motschulsky's description applies.

*Pt. (Platysma) subovatus*, Motsch. Etud. Entom. 1860,  
p. 6; Moraw. Beitr. p. 56.

Hakodadi. Also south coast of Manchuria.  
Mr. Lewis did not meet with this species.

*Pt. (Steropus) orientalis*, Motsch. Ins. d. l. Sibérie,  
p. 151; Morawitz, Beitr. p. 58.

Yesso.

Mr. Lewis did not meet with this species, of which I have examined a large series from Eastern Siberia.

*Pt. (Steropus) tropidurus*, n. sp.

*Pt. madido* major, magis elongatus, niger nitidus, thorace lateribus parum rotundato sed valde angustato, angulis posticis oblique obtuse truncatis, foveis basalibus latis, vagis, crebre rugoso-punctatis, absque plicâ laterali; elytris postice paululum dilatatis, fortiter striatis sed interstitiis planis, striis fundo punctulatis; corpore subtus lævi.

Long. 8 lin. ♂ ♀.

♂ segmento ultimo ventrali, medio basi tuberculo elongato valde compresso; ♀ latissime rotundato.

Hiogo.

The elytra are much longer in proportion than in *Pt. madidus*, with the shoulders rather more advanced; the striae are very strongly and sharply impressed, with faint transverse punctures in their bottom; the interstices are plane, and the third has three punctures. The head is



very similar to that of *Pt. madidus*; the palpi are rather more slender, but are sharply truncated; palpi, apical part of the antennæ and tarsi are rufescent. The thorax is much narrowed towards the base, and at the hind angles shows a distinct oblique truncature; the basal foveæ are wide and shallow, and closely rugose-punctate, the lateral fold is entirely wanting.

*Pt. Thunbergi*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 325; id. Beitr. p. 57.

Hakodadi. Not met with by Mr. Lewis.

If I have rightly determined this species from specimens taken by Mr. A. Adams in Yesso, it seems to me to belong rather to *Steropus* than to *Pterostichus*. In general form it approaches *Pt. (Steropus) tropidurus*, but is distinguished at once by its impunctate base of thorax and the long simple basal foveæ.

*Pt. sphodriformis*, n. sp.

Elongatus, gracilis, piceus nitidus, pedibus ferrugineis; capite pone oculos incrassato, deinde angustato; thorace elongato, cordato, angulis posticis rectis, basi utrinque uni-foveato, punctato; elytris elongato-oblongo-ovatis, parum convexis, thorace antico vix latioribus, apice sinuatis, fortiter striatis, interstitio 3<sup>io</sup> tripunctato; striolâ scutellari brevissimâ obliquâ; tibiis anticis, apice excepto, hand spinulosis.

♂ Segmento ultimo ventrali apice foveâ magnâ profundâ excavatâ, margine apicali fortiter sinuato.

Long.  $8\frac{1}{2}$  lin. ♂ ♀.

Hiogo; four examples.

A fine, elegantly-shaped species, reminding one of the *Sphodri*; also closely resembling *Pt. rufipes*, but much larger. The general colour is pitchy-black or brown, highly polished; the abdomen and palpi rather lighter, and the legs brighter ferruginous. The head is similar in form to *Pt. fasciato-punctatus* and others, but the mandibles are longer and straighter. The thorax has not very prominent anterior angles; it is then rotundate-dilated, and before the middle begins gradually to narrow in an incurved line to the basal angles, which are rectangular; the disk is very smooth; the basal foveæ form long striæ, and their vicinity near the base is faintly punctured. The

elytra are very long, and not broader than the widest part of the thorax; the strongly-impressed striae are faintly punctulate; the underside is glossy. The antennae are longer and more slender even than in *Pt. fasciato-punctatus*. The palpi also are long and slender, and the apical joints obtuse at the apex. The metathoracic episterna are very small, and as broad as long.

*Pt. Yoritomus*, n. sp.

Piceo-niger politus, palpis pedibusque castaneo-rufis; capite post oculos modice incrassatis; thorace quadrato, antice modice rotundato et post medium sinuatum angustato, angulis posticis rectis; basi toto punctato utrinque foveâ elongatâ lineari, alterâque parvâ exteriori extus plicâ marginatâ; elytris elongato-ovatis, fortiter striatis, interstitiis convexis, 3<sup>io</sup> tripunctato.

Long.  $5\frac{1}{2}$ —6 lin. ♂ ♀.

♂ Segmento ultimo ventrali simplici.

Nagasaki; on Mt. Mitsyama.

Shape similar to *Pt. (Platysma) oblongo-punctatus*, glossy pitchy-black or brown; legs and palpi chestnut-red. The head and antennae are very similar to those of *Platysma*, but the palpi are sharply truncated, and the metathoracic episterna are much shorter. The thorax is rather convex, and very smooth and glossy; the anterior angles not produced, the sides gently rounded to beyond the middle, then sinuate-angustate to where the rectangular hind angles slightly project; the base is coarsely but faintly punctured; the larger fovea is long and linear, and there is an exterior much shorter one bounded on the outside by a fold which extends to the hind margin. The elytra are deeply striated, the striae very faintly punctulate, the interstices convex; the posterior sinuation is distinct. Underneath the sides of the thoracic and of basal abdominal segments are very strongly punctured.

*Curtonotus giganteus*, Motsch. Ins. d. l. Sibérie, p. 173, t. 8. f. 1.

Nagasaki; Awomori. Also North of China. Frontiers of E. Siberia, towards Mongolia (Motschulsky).

The largest known species of the genus, 9—10 lines in length; remarkable also for the large and especially broad head. The thorax is similar in shape to that of *C. aulicus*, but the widest part is much nearer the anterior angles, and

it is more rapidly narrowed towards the base; the hind angles are moderately produced and acute, the whole base and anterior border coarsely punctured, the lateral plica separated from the lateral margin. The striae of the elytra are sharp, narrow, and punctulated, the interstices plane. The whole insect is glossy black, except the palpi, which are tawny-red; but the antennae are sometimes rufescent.

Although Motschulsky gives  $7\frac{1}{2}$  lines only as the size of his species, and says the thorax is only a little narrowed behind, I think it is the same as the Japanese one, especially as I have found specimens in a collection made in the North of China.

*C. nitens*, Putzeys, Etudes sur les Amara, p. 234.

Hiogo; Nagasaki; many examples. Also Manchuria, Sze-Chuen, and the North of China.

*C. Hiogoensis*, n. sp.

Latior, minus convexus, oblongo-ovatus, piceus nitidus, antennis, palpis, tarsisque testaceo-fulvis; thorace valde transverso, lateribus modice et subaequaliter rotundatis, angulis posticis obtusis sed apice paulo prominulis; elytris punctato-striatis, interstitiis paulo convexus.

Long.  $6\frac{1}{2}$  lin. ♂ ♂.

Hiogo.

Of broader and more ovate form than its allies. Thorax very little narrowed towards the base; exactly twice broader than long, the broadest part at the middle or a little before, at the base no narrower than at the apex, the sides not sinuated posteriorly, falling obliquely on the base, but the hind angles slightly projecting, although not quite rectangular; anterior border smooth; posterior not much punctured except in the foveae; fold sharp and distinct. Sides of the breast and abdomen thickly punctured; middle of abdomen, especially at the apex, finely punctured.

*Bradytus ampliatus*, n. sp.

Latissimus, breviter oblongus, piceus vel piceo-fulvus, thoracis et elytrorum (late) marginibus, antennis, palpis et pedibus pallidioribus; capite brevissimo, obtuso, foveis frontalibus latis, rugosulis; thorace valde transverso, lateribus vix rotundatis, late explanatis, antice plusquam postice angustato, angulis posticis acutis, basi toto crebre

rugoso-punctato ; elytris thorace paulo latioribus, fortiter punctulato-striatis, interstitiis paulo convexis ; tibiis anticis apice extus longo acute productis.

Long.  $3\frac{1}{2}$ — $3\frac{3}{4}$  lin. ♂ ♀.

Var. Nigro-piceus, palpis, antennis pedibusque testaceo-rufis ; thoracis margine explanato solùm pallido.

Sand Hills at Kobé. Dark var. also at Hiogo.

Variable as to colour ; the var. with concolorous dark-pitchy elytra seems widely distinct from the type, which is of a tawny-brown hue, with a pale border to the elytra occupying interstices 7—8 ; but intermediate varieties occur. The paler (and more abundant) form is very much broader than the European *H. fulvus*. The thorax is broader (twice as broad as long), and has wider explanated margins. The lateral curvature of the thorax is similar to that of *B. fulvus*, but the anterior angles are more produced. The anterior tibiæ are produced at their exterior apical angle into a long pointed lobe, and the outer edge is much flattened and serrated. The sides of the breast and abdomen are thickly and coarsely punctured.

*B. simplicidens*, Morawitz, Beitr. z. Käferf. d. Ins. Jesso, p. 60 ; *Aerodon Uralensis*, Motsch. Etudes Ent. 1860, p. 7 ?

Nagasaki ; Osaka ; Yesso.

Allied to the European *B. consularis*.

*Amara (Celia) chalcophæa*, n. sp.

Modice convexa ; testaceo-fusca, vel piceo-fusca, æneovel cupreo-tincta ; antennis, palpis et pedibus testaceo-rufis ; oculis exstantibus ; thorace transversim quadrato, postice haud angustato, angulis posticis paulo productis, basi omnino punctato, foveis utrinque rotundatis duabus, et plicâ exteriori ; elytris thorace latioribus, ovatis, punctato-striatis, striolâ scutellari elongatâ, interstitiis ♂ convexis, ♀ planis.

Long. 3— $3\frac{1}{4}$  lin. ♂ ♀.

Hiogo ; Nagasaki ; abundant.

In the form of the thorax and elytra similar to *A. Quenselii* ; but eyes much more prominent. The thorax is a little narrower than the middle of the elytra, owing chiefly to the latter being gradually dilated to the middle, whence they are narrowed again to the apex. The base of the thorax is coarsely and thickly punctured, and somewhat

depressed; the two foveæ on each side nearly equal, very distinct and rounded; the exterior one is bounded by a raised wheal. The elytra (and under-surface) vary in colour and amount of metallic lustre; their ground colour is, however, always more or less rufo-piceous, which colour appears in the margins of the darkest specimens. The anterior tibiæ are not especially dilated, and their external edge has a few longish bristles.

*A. (Celia) laticarpus*, n. sp.

Ovata, valde convexa, nigro- vel fusco-picea; antennis, palpis pedibusque testacco-rufis; thorace transversim quadrato, elytris multo angustiori, antice et postice paulo angustato, angulis posticis prominulis, foveis duabus utrinque vix punctatis, exteriori multo minori et absque plicâ marginali; elytris striis vix punctulatis, striolâ scutellari brevi ibique interstitio dilatâtâ; tibiis anticis ad apicem dilatatis, parte dilatâtâ extus breviter 5-spinosâ.

Long. 3 lin. ♀.

Hiogo; two examples.

The species would be almost as well-placed in § *Leiocnemis* as in § *Celia*; but the great width of the thorax gives it an appearance different from that of the species placed in *Leiocnemis*. The head is very short, and the eyes prominent. The thorax is twice as broad as long; more narrowed in front than behind, with anterior angles standing far away from the sides of the head, and the hind angles obtuse, except a small triangular projection; the base is smooth in one specimen, and has a few punctures in the foveæ and near the hind angle in the other; there is scarcely any trace of fold or wheal on the outerside of the exterior fovea. The anterior tibiæ are rather suddenly dilated near the tip, the dilation much rounded, and its outer edge furnished with a row of 5 short and stout spines.

*Amara chalcites*, Zimmerman, Monogr. Amar. p. 34; *similata* var., Dej. Spéc. Gen. iii. p. 46; *congrua*, Morav. Beitr. p. 62; *similata* (*Gyll.*), Motsch. Etudes Ent. 1860, p. 7?

Nagasaki; Hiogo, abundant; Yesso (Morawitz).

A species closely allied to the common European *A. ovata* and *similata*, having the broad shape of the former and the coloration of the legs of the latter.

*A. obscuripes*, n. sp.

*A. spretæ* affinis, paululum latior, suprâ obscure ænea, antennis articulis tribus basalibus rufis, pedibus nigris, tibiis et tarsis piceis, ♂ tibiis intermediis curvatis.

Long.  $3\frac{1}{2}$ — $3\frac{3}{4}$  ♂ ♀.

Nagasaki; several examples.

Resembles *A. spretæ*, but a little broader, the thorax especially broader, and not so gradually narrowed in front. The antennæ have three red joints at the base, and the legs are black, a slight reddish pitchiness being observable on tibiæ and tarsi on close examination; the palpi black. The hind margin of the thorax is nearly straight, and the hind angles not at all produced, but rectangular, their apices being slightly rounded; there is a distinct round fovea just within the angle, and a short oval one distant from the hind margin, and much nearer the dorsal line than the hind angle; the base is smooth or nearly so. The elytra are strongly striated, the interstices convex, most so at the apex, which is considerably prolonged, as in *A. acuminata*.

Group 5. *Bipalmati*.

## Subfam. PATROBINÆ.

*Patrobis flavipes*, Motschulsky, Bull. Moscou, 1864, ii. p. 191; Chaudoir, Ann. Soc. Ent. Belge, t. xiv. p. 40.

Nagasaki; Yang-tsze-Kiang and Hong Kong, China.

*Diplous caligatus*, n. sp.

Depressus, nigro-piceus, antennis rufo-piceis, palpis testaceo-rufis, pedibus obscure piceis, femoribus testaceo-fulvis; capite sulcis crebre punctatis; thorace cordato, antice rotundato post medium fortiter angustato, angulis posticis rectis; supra rugoso-punctato, disco lævi nitido; elytris elongatis, profunde punctulato-striatis, striâ 3<sup>ia</sup> tripunctatâ; subtus thorace et abdominis basi punctatis.

Long.  $5\frac{1}{2}$ —6 lin. ♂ ♀.

Epimera mesothoracica extus valde dilatata; epimera metathoracica brevia, transversa.

Var. (immaturus?) thorace et femoribus castaneo-rufis.

Kawachi; many examples. Under refuse on banks of rivers.

*Diplous* is distinguished from *Patrobis* by its flattened body, and the broad bilobed fourth tarsal joint to the four



anterior legs. The fourth tarsal joint is not very distinctly bilobed in *D. caligatus*, but deeply emarginated, although it has the slender palpi which Chaudoir gives as a character of the genus. As his genus *Platidius* is founded chiefly on the emargination of the joint in question, it would be advisable, perhaps, to merge it in *Diplous*. The thorax is similar in form to that of *Patrobus* (*Pentretus*) *rufipennis*. I observe a good generic character in the widely dilated mesothoracic epimera.

Subfam. TRECHINÆ.

*Trechus postilenatus*, n. sp.

*Tr. disco* affinis; angustus, pubescens, fulvo-testaceus, elytris maculâ posticâ transversâ communi nigrâ; thorace elongato-cordato, postice modice gradatim angustato, angulis posticis rectis; elytris punctulatis, punctato-striatis, striis 1—3 versus apicem fortius impressis, lateralibus distinctis.

Long.  $2\frac{1}{2}$  lin.

Osaka; one example.

Similar in size, form and colour to *Trechus discus*; but the thorax of quite a different outline; it is longer, the sides anteriorly are much less dilated, and posteriorly much less sinuated, the hind angles being rectangular and not acute. The elytra differ also in all the striæ being visible, and in the first three from the suture, especially, being very much deepened and enlarged from beyond the middle to the apex, so that the junction of the recurved first stria with the third is plainly visible.

*T. ephippiatus*, n. sp.

*T. dorsistriato* (Moraw.) proxime affinis, sed multo major. Elongato-ovatus, castaneus nitidus, elytris rufioribus, plagâ magnâ communi nigrâ, palpis pedibusque flavo-testaceis; thorace transversim quadrato, postice paululum angustato, angulis posticis obtusis, apice vix prominulis, lateribus leviter rotundatis; elytris utrinque striis quatuor fortiter impressis et punctatis.

Long.  $2\frac{1}{2}$  lin. ♂ ♀.

Var. *T. ægrotus*; omnino flavo-testaceus.

Nagasaki, several examples of the type; the variety is found at Hiogo; closely allied to *T. rivularis* (Gyl.) and to *T. dorsistriatus* (Moraw.). The thorax is short and broad, its sides slightly rounded; it is not much narrowed

behind, and the hind angles are not quite rectangular, with the points scarcely prominent. The elytra are ovate, convex and very glossy, with a large black patch over the suture, which is sometimes smaller and behind the middle, and sometimes oblong extending nearly to the base; there are four punctured striæ, the first three of which are very strongly impressed, but the third ceases before the apex, and the fourth, deep at the base, becomes faint, and disappears beyond the middle of the elytra; there are traces of a fifth at the base. The usual punctures on the third interstice are small and indistinct.

Although the locality of the variety and its appearance are very distinct, I have failed to find the smallest structural difference from the type.

*Perileptus Japonicus*, n. sp.

Elongatus, sublinearis depressus, pubescens, punctulatus, testaceo-fuscus, antennis basi pedibusque pallide testaceis; frontis lateribus grosse punctatis; thorace cordato-quadrato, postice modice angustato, angulis posticis productis acutis; clytris magis crebre punctulatis opacis, striis quinque, versus apicem obsoletis.

Long.  $1\frac{1}{4}$ — $1\frac{3}{4}$  lin.

Hiogo.

Very similar in form to *P. areolatus*, but conspicuously longer, and with distinct large punctures on the disk of the thorax. The colour is uniform testaceous-tawny, or rather darker, *i. e.*, testaceous-brown; the basal joints of the antennæ and the legs in either case being a little paler. The elytral striæ on the sides and at the apex are more completely obliterated than in *P. areolatus*.

Group 6. *Subulipalpi*.

Subfam. BEMBIDIINÆ.

*Tachys exaratus*, n. sp.

Subdepressus, nigro-piceus nitidus, antennis basi pedibusque testaceo-fulvis; thorace breviter quadrato, postice paulo angustato, lateribus antice rotundatis, angulis posticis rectis; clytris striis fortibus quatuor (quintâ etiam distinctâ), quarum duabus primis apicem attingentibus, striolâ recurvâ fortissimâ cum tertiâ fere conjunctâ.

Long.  $1\frac{1}{3}$  lin.

Hiogo.

In form and colour closely resembling *T. bistriatus*,

thorax with posterior angles more distinctly rectangular; it differs conspicuously in having four broad and deep elytral striæ, with the fifth also tolerably well marked. The first and second striæ continue deep to the apex; the third is also deep as far as the very strong recurved striole, which it nearly touches; the fourth is of equal length to the third, and the fifth much abbreviated.

*T. pallescens*, n. sp.

Subdepressus, testaceo-fulvus, capite postice nigro; thorace postice magis angustato, subcordato, angulis posticis prominulis acutis; elytris oblongo-ovatis, striis tribus profundis, quartâ subobsoletâ, 3<sup>ia</sup> ante striolam recurvam evanescenti.

Long.  $\frac{7}{8}$  lin.

Nagasaki.

Allied to *T. bistriatus*, but the elytra rather more ovate, and the colour pallid dingy-testaceous, with the crown and occiput black, and thorax sometimes inclined to rufous. The thorax is much narrowed behind, and the projecting hind angles cause the margin to be markedly sinuated just before them. There are three deep and broad striæ, but the third is faint before reaching the recurved striole; the fourth stria is but slightly traced. There is a large puncture or foveole on the fourth interstice before the middle of the elytra.

*T. sericans*, n. sp.

Subdepressus, rufo-testaceus, elytris late sericeo-micantibus, capite postice nigro; elytris post medium fasciâ fuscâ lateraliter late vage dilatatâ, tri-striatis, striâ 3<sup>ia</sup> vix impressâ unifoventâ; pedibus flavo-testaceis.

Long.  $1\frac{1}{4}$ .

Nagasaki.

Allied to *T. fulvicollis*; but elytra more ovate, and with a bright silky gloss. Two striæ only strongly impressed; the third faint and abbreviated, with a large puncture before the middle; the first stria alone reaches the apex, the second and third being quite obliterated long before the apex; the dusky fascia is very vaguely defined, and is dilated irregularly on the sides. The thorax is quadrate, moderately narrowed behind, with the hind angles rectangular and not at all produced.

*T. triangularis*, Nietner, Journ. Ceylon Br. R. Asiat. Soc. 1857, p. 72; Schaum, Berl. Ent. Zeit. 1863, p. 91; *Bemb. atriceps*, W. Macleay (1871).

Nagasaki. Also at Kiu-Kiang, on the Yang-tsze; Celebes; Ceylon; Egypt (Schaum); Yemen, Arabia; Melbourne and Queensland, Australia.

Differs from *T. sericans* in the dark elytral fascia being black and extended along the suture, and in the striæ being punctured and six in number; the two sutural very deep, and the external ones gradually fainter. Egyptian specimens, as Schaum rightly observes, differ in the black fascia being narrower at the suture; but I have a specimen from Southern Arabia, very similar to those from Egypt, but having the black fascia as in Chinese examples.

*T. latificus*, n. sp.

Elongato-ovata, convexa, nigro-nitida, antennis basi, pedibus, elytrorumque maculis utrinque duabus, flavo-testaceis; thorace lato transverso, post medium angustato, angulis posticis rectis, lateribus antice rotundatis; elytris striis duabus fortiter impressis, disco bipunctato, striâ 8<sup>va</sup> passim profundâ.

Long.  $1\frac{1}{4}$  lin.

Nagasaki.

Extremely near *T. Lucasii* (Algiers), but without any trace of a third stria on the elytra. The thorax is distinctly narrower, and the pale spots of the elytra not quite so clearly defined. From *T. quadrillum*, Schaum, it differs in its larger size, deep 8th striæ, &c.

*T. fuscicauda*, n. sp.

*T. ovatus*, convexus, castaneo-rufus nitidus, antennis apice capiteque postice nigris, elytris apice fuscis, maculis utrinque indistinctis duabus pallidioribus, dorso utrinque striis punctatis tribus fortissimis; pedibus pallidis.

Long. 1 line.

Nagasaki; many examples.

Of shorter and more ovate form than *T. hæmorrhoidalis*, thorax short and broad; considerably narrowed behind and rounded anteriorly, giving it a cordate appearance; hind angles rectangular and acute at their apices. Elytra ovate, moderately convex; three striæ from the suture are deep and coarsely punctured; a fourth is also visible in the middle, and the eighth is deeply impressed throughout;

the second and third are much abbreviated behind. In colour the elytra are chestnut-red, like the thorax, but there is a large pale spot near each shoulder, and a transverse one towards the apex, which are not sharply defined from the ground colour; and the extreme apex is dingy-brown, though glossy, this latter colour sometimes remounting up the sides of the elytra.

Allied to *T. ornatus* and *Scydmaenoides* (Nietn.) of Ceylon, but distinguished by its three punctured striae. *T. Scydmaenoides* was taken by Mr. Lewis at Kiu-Kiang on the Yang-tze, in China; it appears to be closely allied to *T. geminatus* (Schaum), from Celebes.

*T. perlutus*, n. sp.

Breviter oblongo-ovatus, convexus, flavo-testaceus nitidus; frontis sulcis angustis distantibus postice divergentibus; thorace valde transverso, antice valde, postice minime angustato, lineis impressis obsoletis, angulis posticis rectis; elytris striâ suturali solùm impressâ, subtili, striâ 8<sup>va</sup> antice obsoletâ.

Long.  $\frac{2}{3}$ — $\frac{3}{4}$  lin.

Nagasaki; many examples.

Allied to *T. globulus* (Dej.) of Algiers; but less convex, and entirely pale yellow-testaceous, with the exception of the apical part of the antennæ, which is pale brown. It differs also in having only the sutural stria visible, and that finely impressed; the disk does not show the usual punctures. The recurved stria is fine and curved, and is in the situation of the apex of the third stria. The anterior tibiæ are slender, very obliquely truncated externally at the apex, and furnished with setæ at the upper angle of the truncature. The species is very closely allied to *Bemb. ovatum*, W. Macleay; Queensland.

*Tachyta microscopica*, n. sp.

Oblongo-ovata, depressa, rufo-testacea, nitida, capite postice elytrisque fuscis; antennis pedibusque pallidis; thorace cordato-quadrato, convexiusculo, angulis posticis rectis; elytris juxta suturam depressis, striâ suturali solùm et fortiter impressâ, disco bipunctato, striolâ recurvâ, foveolâ superiori exceptâ, obsoletâ.

Long. fere  $\frac{1}{2}$  line.

Nagasaki; many examples.

Very closely allied to *T. livida*, Bates (Ent. Monthly Mag. vol. viii. p. 13), from Adelaide and Melbourne;



but rather more ovate and less parallel in form; elytra dark brown, not concolorous with the thorax; the hind thoracic angles more rectangular, and the sutural stria very deeply impressed. The sutural stria lies in a sutural depression, both depression and stria beginning at some distance from the base, and continuing to the apex. The recurved striole which in *Tachyta* lies near the lateral margin is not visible in this species; but the large puncture which marks its termination is plainly visible. This is nearly the same in *T. livida*, but a shallow striole is perceptible behind the puncture. There are in both species other large punctures parallel and near to the lateral margin, which represent the eighth stria. The antennæ are short and submoniliform; the anterior tibiae obliquely truncated externally at the apex, and broader than in *Tachys*.

*Tachys atomarius* (Wollast.), Cape Verde Islands, is also closely allied to *T. livida*, and has a similar interrupted or obsolete recurved striole. These three form a natural sub-group in the genus.

*Tachypus semilucidus*, Motsch. Etud. Entom. 1861, p. 24; *T. nubifer*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 327.

Nagasaki, abundant; Yesso. Also at Hong Kong, in China, and on the banks of the Amur.

Allied to *T. flavipes*, but with dark-pitchy legs, antennæ and palpi, and glossy spots on the elytra. Motschulsky's description is quite recognizable, and has the priority over that of Morawitz.

*Bembidium stenoderum*, n. sp.

*B. impresso* affine, supra cupreo-æneum vix nitidum, antennæ scapo pedibusque rufo-testaceis, æneo-tinctis; thorace antice a medio angustato, angulis posticis fortiter productis acutis; elytris fortiter punctato-striatis, interstitio 3<sup>io</sup> plagis duabus opacis metallicis.

Long.  $2\frac{1}{2}$  lin.

Osaka.

Distinguished from the European species of the *paludosum* group by the thorax being scarcely at all rounded on the sides, and gradually narrowed from the middle anteriorly; behind the middle it is not narrowed, although the margin is strongly sinuated, the hind angles being much



produced; the hind margin is cut obliquely on each side; the surface is finely rugulose, shining on the disk but opaque on the hind borders; the basal fovea is distant from the angles, short and oblique. The elytra are much narrower than in *B. impressum*, and much more strongly striated; the interstices are more finely sculptured.

*B. conicicolle* (Motschulsky), from Eastern Siberia, appears to be closely allied to the present species; but the hind angles of thorax are described as rectangular, and the margin straight.

*B. (Notaphus) niloticum*, Dej, Spéc. Gen. v. p. 73.

Nagasaki. Also China.

I do not detect any difference of importance between Egyptian specimens and others from the Yang-tsze-Kiang. Mr. Lewis's collection contains a small individual from Nagasaki. The elongation and convergence on the epistome of the frontal grooves distinguishes the species.

*B. (Peryphus) cognatum*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 327; id. Beitr. p. 81; *P. femoratus* (Sturm), Motsch. Etudes Ent. 1860, p. 5?

Nagasaki.

Closely allied to the European *B. Bruxellense*, differing almost solely in the rather longer and less rounded thorax, with less sinuated sides.

*B. (Peryphus) lunatum*, Duftsch. et auctor.

Hiogo; Nagasaki.

I am unable to discover any specific difference between Japanese examples and others taken in England.

*B. (Peryphus) consummatum*, n. sp.

Depressum, nigro-æneum, antennarum scapo rufo, pedibus piceo-rufis, elytris striis omnibus integris, ante apicem maculâ communi lunatâ flavo-testaceâ.

Long.  $2\frac{1}{3}$ — $2\frac{2}{3}$  lin.

Kobé; on the beach.

Allied to *B. tibiale*. Body similarly depressed. The frontal furrows are broad, leaving a rather narrow convex space down the middle. The thorax is cyathiform, *i. e.*, very much rounded on the sides (with deflexed anterior angles), and strongly narrowed or constricted near the base; the hind angles are rectangular, the base rugose-

punctured. The elytral striae are all distinct, from the base to the apex, all the dorsal ones, except the 7th, being very strongly impressed and punctured; the yellow lunate spot is subapical, the apex itself being of the ground-colour. The basal joints of the antennae and palpi are red; the legs a dingy reddish.

*B. (Peryphus) Hiogoense*, n. sp.

*B. tibiale* proxime affine, differt tibiis et tarsis nigris. Depressum, nigro-aneum, antennarum scapo subtus rufo; thorace quadrato, angulis anticis conspicuis rectis, postice modice angustato, angulis posticis vix prominulus; elytris profunde punctulato-striatis, striâ 3<sup>ia</sup> bifoveatâ.

Long.  $2\frac{1}{2}$  lin.

Hiogo, sandy places. Also on the beach at Kobé.

There is no difference apparent between this species and the European *B. tibiale*, except in the colour of the legs. The head has the same broad frontal furrows; the thorax is less narrowed behind; the hind angles are rather less prominent, and the sharp fold near each angle is longer and more conspicuous. The elytra have the striae much more strongly marked near the apex. The legs are wholly brassy-black, except in immature specimens, where they are of a uniform brown. The palpi and antennae are black, except the underside of the scape, which is reddish.

It is closely allied to *B. Gebleri* (Esch.) (= *cælestinum*, Motsch.?), which has a shorter and broader thorax and is a considerably smaller insect.

*B. (Peryphus) lissonotum*, n. sp.

Elongatum, depressum, nigerrimum, cyaneo-reducens; scapo rufo; thorace subcordato, postice angustato, angulis anticis valde deflexis, posticis prominulis acutis, lateribus postice sinuatis, suprâ foveâ utrinque basali profundâ, lævi, plicâ laterali nullâ; elytris profunde punctulato-striatis, striâ 6<sup>ta</sup> vix impressâ, 7<sup>ta</sup> obsoletâ.

Long.  $2\frac{3}{4}$ —3 lin.

Hiogo; sandy places.

Of similar narrow, elongate shape to *B. decorum*, surface with a changing bluish, almost opalescent lustre, on a deep glossy-black ground; the scape of the antennae and extreme base of the palpi alone are reddish. The thorax differs from the allied species in wanting the sharp fold or raised line near the hind angle; the foveae are unusually

deep and smooth, and the anterior angles dip to the sides of the neck, to which they are closely applied.

Group. 7. *Truncatipennes*.

Section *Eleutheroglossæ*.

Subfam. ODACANTHINÆ.

*Ophionea cyanocephala*, Fab. Ent. Syst. Suppl. p. 60.

Nagasaki; common in fenny districts; China; India.

Japanese specimens do not differ from those of Hong Kong and Bengal.

*Casnonia flavicauda*, n. sp.

*C. latifasciæ* (Chaud.) simillima; differt elytris apice testaceo-fulvis. Nigro-fusca nitida, antennis articulis 3 basalibus, palpis, pedibus, elytrorumque maculâ magnâ apicali antice ad suturam emarginatâ, testaceo-fulvis; capite intrâ oculos solùm (grosse) punctato, thorace grosse haud confertim punctato; elytris fortiter punctato-striatis.

Long. 3—3½ lin.

Osaka. Also Foochow, China. Many examples.

The head is convex, and gradually narrowed behind the eyes. The thorax is broadest in the middle, gradually narrowed anteriorly, and rather more suddenly so posteriorly to the basal transverse groove. The apical spot of the elytra generally covers the apical third, but deeply emarginated in front on the suture; but sometimes the sutural emargination continues to the apex, and in rare cases the ground colour also indents the spot deeply on each side; the apex itself, however, is never of the ground colour, as in *C. latifasciæ*. In most examples one or two narrow fulvous streaks extend along the lateral margin nearly to the base. The apical ventral segment is more or less fulvous.

Section *Heteroglossæ*.

Subfam. GALERITINÆ.

*Drypta lineola*, Dej. Spéc. Gen. i. p. 184.

Var. *Japonica*, Bates.

Osaka; one example. There is another from Japan, exactly conformable, in the British Museum.

The Japanese var. or species differs from Chinese specimens in being larger (4½ lines), with thorax more gradually narrowed in front and more constricted near the base, and

tibiæ and tarsi (like the femora, except the black tips) clear fulvo-testaceous. The colour of the antennæ and palpi is the same; the width and length of the red discal vitta of the elytra vary in *D. lineola*, but it always reaches the apex; in *D. Japonica* it does not reach the apex, and the 1st interstice continues dark blue to the end of the suture.

*Galerita Japonica*, n. sp.

Elongata, robusta, subangusta, elytrorum humeris valde obliquis; nigra; capite, antennis, palpis, thoracisque disco testaceo-rufis; pedibus flavis, femorum apice nigro; capite grosse scabroso-punctato, postice usque ad collum lato subquadrato; thorace elongato-quadrato, antice paulo, postice sinuatim, angustato, angulis posticis rectis sed reflexis et apice rotundatis; elytris elongatis, parallelis, costatis, interstitiis bi-striatis.

Long. 10 lin. ♂ ♀.

Nagasaki; Yokohama; many examples.

Closely allied to *G. nigripennis* (Chaud.), and *G. indica* (Chaud.), from Northern India. Similar in colours and shape, especially in the form of the elytra, rounded and narrow at the shoulders, but not dilated behind. The thorax is as long as broad, not cordate, but narrowing slightly from its broadest part (before the middle) to the obtuse anterior angles; behind it is narrowed a little more, with slightly sinuated sides, which fall rectangularly on the hind angles, although these are blunt at their apices; the black margins of the thorax are more or less broad.

*Planetes bimaculatus*, Macleay, *Annulosa Javanica*,  
p. 28, t. 2, f. 3.

Nagasaki; Hiogo. Under stones, abundant. Also China.

I have compared specimens with Macleay's type (from Java) in the British Museum, and find no other difference than the slight prominence of the posterior angles of the thorax, which seems also to be a little more rounded on the sides in front.

The genus has been erroneously placed in the *Helluonina* subfamily, from which it differs in the short truncated labrum and the ligula furnished with very long, narrow paraglossæ, which are nearly three times the length of the ligula, and are strongly curved. The ligula itself is short,

very convex, rounded at the apex, and furnished with many long stiff bristles. The tooth of the mentum is furrowed in the middle and notched at the tip. The sculpture of the elytra (ill-described by Macleay) is like that of the typical *Galeritæ*; sharp ridges or raised lines, with two smaller raised lines in each interval between them.

Subfam. BRACHININÆ.

*Pheropsophus Jessoensis*, Morawitz, Bull. Acad. St. Petersb. v. 1863, p. 322; id. Beitr. p. 23, t. 1, f. 9.

Hiogo; Nagasaki. Also North China.

*Brachinus scotomedes*, Redtenbacher, Reise der Novara, Coleop. p. 5.

Yokohama.

A fine large species ( $7\frac{1}{2}$  lines), with head, thorax, antennæ and legs testaceous-red, and elytra dull grayish-black, feebly carinated.

*B. stenoderus*, n. sp.; *B. longicornis*, Motsch. Schrenck's Reise, Coleopt. p. 92? (1860).

Elongatus, rufus, pectore et abdomine fusco-marginatis; elytris cyaneis, convexis, costis acutis septem nitidis, interstitiis granulatis, breviter fulvo-pubescentibus; capite postice elongato, gradatim angustato; thorace angusto, lateribus antice parum rotundatis, postice longe sinuatis, suprâ punctulato et transversim striato.

Long.  $3\frac{1}{2}$ — $5\frac{1}{2}$  lin.

Nagasaki; Kawachi, very abundant.

The underside of the body is coloured as in *B. fumans*, except that the dusky border is more distinctly defined. The general shape is also similar to that of *B. fumans*, but the thorax is very different and peculiar in outline, being very little rounded on the sides anteriorly, and *not narrowed* to the anterior angles, which are distinct and not deflexed. The elytra are oblong-ovate, with squared shoulders; the costæ, including the sutural, are seven in number; narrow, sharp and shining, of a darker hue than the blueish-green of the interstices; an eighth costa appears towards the tip in large individuals; the deflexed epipleuræ are blue. The legs and antennæ are rather more elongated than usual.

If the species be the *B. longicornis* of Motschulsky, his

name cannot stand, as the prior *longicornis* of Fairmaire (1858) is a true *Brachinus*.

The species varies much in certain points. In form: the degree of convexity of the elytra is very variable, and so is the amount of abbreviation of the costæ before the apex. In colour: the antennæ are sometimes concolorous tawny-red, but most frequently more or less dusky-red, the duskiness commencing at the third joint in some examples and not before the fifth in others; beneath the episterna are sometimes red, and the sides of the abdomen dusky; more frequently the metathoracic episterna are dusky, like the sides of the abdomen; but in some examples the whole abdomen is fuliginous, and in rare cases the mesothoracic episterna are dusky *and not the metathoracic*. All gradations are found, and the variations do not occur in conjunction.

*B. incomptus*, n. sp.

Testaceo-rufis, abdominis lateribus infuscatis, elytris cyaneo-nigris; capite postice haud gradatim angustato; thorace fortiter cordato, postice sinuato, angulis posticis haud productis, suprâ dense pubescenti, punctulato, parum nitido; elytris oblongis postice leviter dilatatis, costis octo modice elevatis vix nitidis.

Long.  $2\frac{1}{2}$ — $3\frac{1}{2}$  lin.

Hiogo; Nagasaki.

The eyes are much more prominent than in *B. crepitans*, and the sides of the head behind the eyes are parallel. The thorax is much more rounded on the sides anteriorly than in *B. crepitans*, and more abruptly sinuate-angustate behind; its surface is dotted with dense erect pubescence. The elytra are also pubescent on the somewhat obtuse costæ as well as the interstices.

*B. Lewisii*, n. sp.

Latus, sordide fulvo-testaceus, pectoris lateribus et abdomine fuscis; elytris acute costatis, nigro-fuscis, plagis utrinque duabus flavo-testaceis, primâ pone medium, discoidali transversâ dentatâ, secundâ apicali quadratâ cum margine apicali flavo conjunctâ.

Long. 5 lin.; lat. elytror.  $2\frac{1}{2}$  lin.

Satsuma. One example.

A remarkable species, approaching in form *B. nobilis*, but with the elytra more convex and dilated posteriorly. The head is short, and narrowed almost immediately



behind the eyes; the antennæ become a little browner towards the apex. The thorax is short and cordate, the sides strongly rounded anteriorly, the anterior angles deflexed and scarcely visible, strongly sinuated posteriorly, with produced and acute hind angles; the surface is punctate, faintly rugose, and pubescent, and there is a transverse black vitta on the hind margin. The elytra have distinct but rather obtuse-angled shoulders, which arises from their being dilated immediately from the shoulders towards the apex; there are eight sharp, shining costæ (the eighth becoming obsolete towards the base), the interstices are minutely punctured and opaque.

*Crepidogaster bicolor*.—*Brachinus bicolor*, Bohem.

Eugenies Resa, Coleopt. p. 3.

Kawachi, many examples; China (Bohem.). Under stones in fir woods; crepidates strongly.

Japanese specimens agree in almost every particular with Boheman's description, and it is remarkable (if it be really the same species) that he should not have recognized the species as belonging to his own genus *Crepidogaster*. Its opaque surface and thickened antennæ give it a different facies from the *Brachini*, and its tumid, securiform labial palpi are very conspicuous.

#### Section *Detoglossæ*.

##### Subfam. MASOREINÆ.

*Masoreus adelioïdes*, Macleay, Annul. Javan. p. 23,  
t. 8, f. 2.

Nagasaki; under stones on hills.

A species of wide distribution, being found in Java, Bengal, Birmah, Cochin-China, Japan, and Western Australia. I have compared Japanese specimens with others from Saigon and West Australia (from Mr. Du Boulay's collection), without discovering any difference of importance.

##### Subfam. DROMIINÆ.

*Dromius quadraticollis*, Morawitz, Bull. Acad. St.  
Petersb. v. 1863, p. 244.

Kawachi; beaten from trees, August. Amur (mouth of the Usuri), Morawitz.

Of the size and colour of *D. agilis*, but with longer and,

behind, rectangular thorax. I doubt whether it can be retained in the genus *Dromius*, as the terminal joints of the palpi taper to a point, and the ligula large, convex, and horny; the legs are similar to those of *Dromius*, the claws pectinated, and the mentum furnished with a tooth.

*D. optimus*, n. sp.

*D. fasciato* (Dej.) affinis, at multo major. Elongatus, subangustus, fuscus; antennis, partibus oris, pedibus, thoracisque margine laterali testaceo-fulvis; elytris testaceo fulvis, vittâ suturali basi et postice dilatâtâ, alterâ intramarginali, fasciâque angulatâ pone medium fuscis.

Long.  $2\frac{1}{2}$  lin.

Nagasaki; under bark of various trees.

Larger and relatively longer, and more parallel-sided than *D. fasciatus*. The thorax is quadrate, much broader than long, moderately narrowed behind, with obtuse, although distinct hind angles; the disk is generally brown with the margins pale, but sometimes one colour blends into the other. The elytra are elongate, the striæ broad and shallow; the brown sutural vitta has a triangular dilatation over the scutellum, and an oblong one at two-thirds the length, after which it terminates; the lateral vitta is of moderately equal width from the humeral to the apical angle, leaving the lateral rim always fulvous; the fascia is very variable in width and in intensity of colour, but it always forms an angle, projecting forward almost as in *D. sigma*.

*Apristus striatus*, Motschulsky, Coléop. d. l. Sibérie, p. 63.

Hiogo; under sediment in dried beds of rivers. Nertschinsk, E. Siberia (Motsch.).

The Japanese specimens agree very well with the detailed description above quoted; but the size is a little larger,  $1\frac{3}{4}$ —2 lin., instead of  $1\frac{1}{2}$ — $1\frac{3}{4}$  lin., a discrepancy the less to be regarded as Motschulsky's measurements almost always err by defect. The forehead has numerous punctures and faint longitudinal striæ, and central depression sometimes large, and communicating with the lateral furrows. The species differs from the European *A. reticulatus* (Schaum) in scarcely anything except the deep striæ, or rather sulci of the elytra; these sulci are punctured on the sides in Japanese specimens. It much resembles *A. subsulcatus*, but the thorax is of a different

shape, narrower, less rotundate, dilated anteriorly, and with less prominent hind angles.

*A. rufiscapis*, n. sp.

*A. striato* formâ et colore simillimus, at differt thorace minus cordato, elytris striis nullomodo punctatis, scapoque antennarum rufo. Oblongus, vix convexus, æneo-niger, subnitidus, scapo antennarum piceo-rufo; thorace quadrato mox pone angulos anticos leviter dilatato deinde usque ad basin paulo sinuatim angustato, angulis posticis rectis; elytrorum striis latis, paulo impressis, nullomodo punctatis, 6—8 obsoletis.

Long.  $1\frac{3}{4}$  lin.

Nagasaki; one example.

*A. secticollis*, n. sp.

Angustus, depressus, niger; suprâ obscure æneus toto subtiliter sculpturatus, subopacus; thorace cordato, angulis omnibus prominulis, lineâ dorsali profunde insculptâ et utrumque marginem attingenti; elytris haud profunde sed distincte striatis.

Long.  $1\frac{1}{2}$  lin.

Tango; one example.

Much narrower than *A. reticulatus*. Dark bronze in colour, the whole upper surface rendered almost opaque by minute punctures standing extremely close together, but never confluent. The dorsal line of the thorax forms a sharply-cut furrow, extending from the anterior to the posterior margin.

*A. cuprascens*, n. sp.

Angustior, depressus, nigro-æneus, elytris fusco-cupreis, late striatis et costatis; fronte haud punctato; thorace angustiori, angulis prominulis, antice vix rotundato postice gradatim angustato, suprâ nitido, lineâ longitudinali antice abbreviatâ.

Long.  $1\frac{1}{4}$ — $1\frac{1}{3}$  lin.

Hiogo; several examples.

Much narrower than *A. striatus*, but broader than *A. secticollis*; surface of head and thorax moderately shining, without denser and coarser punctuation. In the middle of the forehead is an isolated puncture, obsolete in some examples, but no other punctuation is visible. The thorax is conspicuously narrower, and less rounded an-

teriorly than in *A. subsulcatus*, which the species much resembles; behind, the narrowing is long and gradual. The sulci of the elytra are without visible punctures.

Subfam. CYMINDINÆ.

*Cymindis pictula*, n. sp.

Depressa, fusco-cupreo-ænea, vix nitida; antennis, palpis, pedibus, elytrorumque margine et maculis duabus fulvo-testaceis; capite post oculos utrinque tumido deinde in collum constricto; antennis brevibus, crassis; thorace cordato, basi medio rotundato, angulis posticis elevatis, acute productis; elytris fortiter striatis.

Long.  $2\frac{1}{3}$  lin.

Nagasaki; one example.

The orbit behind the eye is as prominent and nearly as long as the eye itself. The surface of the head is finely alutaceous and sprinkled with punctures; the labrum, palpi, and the short thickened antennæ, are of a more pitchy-testaceous than the legs, which are yellowish-tawny. The thorax is rounded, almost angulated on the sides anteriorly, then gradually narrowed to the hind angle, which projects as a small sharp tooth; the middle of the base forms a short, broad, rounded lobe; the whole surface is somewhat regularly and sharply transverse-striate; the lateral rims are extremely fine. The elytra are very finely punctulate and alutaceous, deeply and simply striated; the lateral margin, a short vitta within the shoulder (extending from the base along the sixth and seventh interstices, with an adjoining spot on the fifth), and a common sutural-apical spot, lying on the first and fourth interstices, emarginate in front on the suture, and scarcely touching the apex, testaceous-tawny. The fourth tarsal joint in the anterior legs is emarginate, in the posterior simple.

*C. rivularis*, Motsch. Ins. d. l. Sibérie, p. 45; Chaudoir, Bull. Mosc. 1850, iii. p. 85.

Nagasaki; Eastern Siberia.

*C. daimio*, n. sp.

Elongata, convexa, fulvo dense hirsuta, grosse punctata; fulva, capite, thorace, elytrorumque maculâ apicali bilobâ nigro-cyaneis.

Long. 4 lin.

Nagasaki, on hills 2,000 feet, under stones; three examples.

Allied to *C. Faldermanni* (Chand.), but the thorax differently shaped, and the pubescence shorter and more erect, &c. Head gradually narrowed (but rather full) behind the eyes, shining blueish-black, coarsely punctured. Palpi and antennæ testaceous-red. Thorax convex, cordate; sides anteriorly strongly rounded, posteriorly narrowed and deeply sinuated, with projecting hind angles, which form broad triangular lobes; the short basal lobe occupies nearly the whole of the base, there being on each side only a rectangular indentation, which leads rather obliquely to the apex of the angle; the whole surface is coarsely and closely punctured; the dorsal line is distinctly marked, the lateral margins not at all explanated. The elytra are very deeply punctate-striate, with convex interstices, and the apex is obtusely rounded rather than truncated; the apical spot is of a brighter steel blue than the head and thorax; along the sides it reaches half-way up the elytra, but it is sinuated in the middle, almost to the apex, by the tawny-red ground colour; the limits of the two colours are well defined throughout.

Subfam. CALLEIDINÆ.

*Endynomena Lewisii*, n. sp.

Oblonga, subdepressa, erecte pubescens, fusco-picea; antennis, partibus oris, pedibus, marginibusque thoracis et elytrorum rufo-piceis; oculis exstantibus; thorace lato, lateribus antice et angulis anticis valde late rotundatis, longe post medium sinuatim angustatis, angulis posticis obtusis, basi lobo lato brevissimo; elytris quadratis, punctatis, punctulato-striatis.

Long.  $4\frac{3}{4}$ —5 lin.

Nagasaki; many examples.

Differs from *E. Pradierii* (the only other described species) in the very convex prominent eyes, the head abruptly narrowed behind them; in the rudiment of a basal lobe to the thorax, and the distinctly striated elytra. It agrees with the other characters of the genus, the pluri-setose ligula, toothed mentum, sinuate and rounded labrum, hairy surface of the tarsi, and so forth; and as I have another species from Bombay exactly intermediate between *E. Lewisii* and *Pradierii*, there is reason for referring them all to one genus, giving a little extension to the definition drawn up by Baron Chaudoir. The insect is much

broadier than *E. Pradieri*, and much darker in colour, slightly shining. The antennæ are very similar. The head differs only in the greater convexity of the eyes; it is punctate on each side, and has some strigæ towards the base of the antennæ. There is a great similarity in the outline of the thorax, but it is very much broader, and the slight basal lobe is only a further development of the arcuated base-line of *Pradieri*. The elytra are throughout thickly punctulated, and have very distinct punctured striæ. The abdomen and metasternum are punctured and pubescent.

The metathoracic epimera in all three species are very short and transverse-linear.

#### PARAPILEA, nov. gen.

Corpus oblongum, vix convexum, glabrum. Caput thorace angustius; oculis modice prominulis. Labrum transversum, antice paulo dilatatum, sinuato-truncatum, angulis rotundatis. Palpi sparsim pilosi, articulo ultimo maxillarium cylindrico, labialium triangulari, truncato. Mentum medio valide dentatum; lobis extus rotundatis, apice obtuse acuminatis, epilobia obtusa haud superantibus. Ligula apice quadrisetosâ; paraglossis per apicem obductis, haud longioribus. Antennæ ab articulo 4<sup>to</sup> pubescentes. Thorax transversim quadratus, basi late breviter lobatus. Tarsi suprâ pilosi; articulo 4<sup>to</sup> anguste bilobato; ungiculi pectinati.

Closely allied to *Endynomena*, from which it differs in the distinctly lobed base of the thorax. The insect on which it is founded much resembles several Australian species, which differ chiefly in the much shorter pectination of the claws and other characters.

#### *Paraphæa signifera*, n. sp.

Rufo-testacea, nitida, elytris vittâ submarginali ad apicem et prope scutellum valde dilatâtâ, nigro-piccâ.

Long. 4—4 $\frac{1}{4}$  lin. ♂ ♀.

Satsuma.

Of broader form than the allied Australian species *Calleida pacifica*, Erichs. and allies.\* Head smooth, narrowed immediately behind the eyes. Thorax much

---

\* Formed into a genus, *Trigonothops*, by Mr. W. Macleay, but since referred by him again to the genus *Calleida*.



broader than the head (eyes included), transverse quadrate; broadly dilated and rounded immediately from the obsolete anterior angles, sides not angulated, narrowed (scarcely sinuated) after the middle, hind angles rectangular and slightly produced; the base on each side the short, but not broad, lobe, is first slightly indented, and then inclined obliquely to the hind angle; the lateral margins are widely explanated, and the disk strigose. Elytra oblong, not dilated behind, broadly subsinuate-truncate; finely punctate-striate; interstices very faintly and sparsely punctulate, here and there slightly convex in the middle; third with two punctures; the dark pitchy-brown colour is very broad at the apex, extending there a little forward along the suture; at the sides it occupies interstices 6—9; at the base within the shoulder it is very narrow, expanding into a spot nearer the suture; if we except the pale margins, the elytra might be described as pitchy-black, with a large tawny-red patch on each, united at the suture.

*Bothynoptera perforata*, n. sp.

Supra fulvo-fusca nitida, capitis maculis, thoracis lineâ dorsali et marginibus, pedibus et antennarum basi testaceo-fulvis; thorace transversim quadrato; elytris subtilissime striato-punctatis, foveolis magnis quatuor in lineam digestis.

Long.  $5\frac{1}{2}$  lin.

Hiogo; three examples, on foliage.

Differs from the description and figure of *B. dorsigera* (Schaum) in the slightly broader thorax and the absence of yellow patch from the middle of the elytra. The whole upper surface is of a fine tawny-brown colour, highly polished; the margins and suture of the elytra are a little lighter, or yellower, in colour; and so are the borders and dorsal line of the thorax, and the sides and large frontal spot of the head. The antennæ are pitchy-red, with the scape yellowish; the palpi also, as well as the whole under surface, are yellowish. The head has two broad and deep frontal foveæ. The thorax does not differ in outline from that of *B. dorsigera*, except in being conspicuously broader. The elytra widen gradually and slightly from base to apex; the latter is broadly truncate and slightly sinuate; the striæ are reduced to lines of very fine punctures, and the interstices are sparsely punctulate. The first and

second of the large foveæ lie over the third stria, the third and fourth over the second.

*B. tripunctata*, n. sp.

Fulvo-testacea, capite postice, thorace et elytris fusco-piceis; thorace quadrato, angulis et lateribus anticis rotundatis, angulis posticis obtusis; elytris obtuse truncatis, fortiter punctulato-striatis, interstitio 3<sup>io</sup> tripunctato.

Long.  $3\frac{1}{4}$ —4 lin.

Tanga, Kawachi; on foliage.

Eyes extremely prominent. The whole head and antennæ are sometimes tawny-yellow, except a dark patch on the crown. The thorax is nearly as long as broad; rounded as usual anteriorly, moderately sinuate-angustate posteriorly, with the hind angles, though prominent, rendered obtuse by the obliquity of the sides of the base. The elytra are dilated posteriorly, but obtusely truncate, the outer angles being rounded, and the truncature not at all sinuate; the surface is deeply striated, and the striæ punctured; the interstices sparsely punctulate; the margins are more or less rufous.

TAICONA, nov. gen.

Gen. *Bothynoptera* proxime affinis; differt mento dente valido armato. Caput, cum oculis valde prominentibus, thorace latius. Labrum antice dilatatum, medio leviter sinuatum, angulis rotundatis. Palpi truncati, haud securiformes. Mentum medio dente valido armato; lobis acute triangularibus, epilobiis acutissimis, longioribus. Ligula quadrisetosa, setis externis longioribus, paraglossis intus infra apicem conniventibus. Elytra fortiter striata, metallica. Tarsi suprâ pilosi.

By its hairy tarsi this genus belongs to the section of *Calleidinae* in Baron Chaudoir's classification to which *Bothynoptera* belongs; but the form and armature of the mentum is quite different; in fact the change of form of this organ in genera so closely allied quite destroys one's confidence in its importance as a systematic character. It is furnished with a large triangular tooth; and the lobes, instead of being broadly rounded at the sides and tip, as in *Bothynoptera*, *Crossoglossa*, &c., taper in a straight line to a pointed apex, surpassed by the spiniform epilobes. The tarsi have the narrow form of those of *Calleida*, with the basal joint, in the posterior feet, nearly as long as the

three succeeding taken together; the claws are dilated, and the pectination remarkably long and close.

*Taicona aurata*, n. sp.

Testaceo-rufa, nitida, elytris late viridi-æneis, lateribus aureis,

Long.  $3\frac{1}{2}$  lin.

Nagasaki; on foliage.

Head smooth and glossy. Thorax conspicuously narrower than the head; not much dilated and rounded from the anterior angles; strongly sinuated on each side after the middle, but at the base not narrower than at the apex; hind angles obtuse, but projecting; lateral explanated margins rather narrow. Elytra oblong-ovate; three times as wide as the thorax; slightly dilated posteriorly; sinuate-truncate at the apex, with exterior angles of the truncature broadly rounded; surface moderately convex, without distinct inequalities; strongly punctate-striate, with four punctures each on the 3rd and 5th interstices; brilliant brassy-green; sides and apex rich golden.

*Crossoglossa latecincta*, n. sp.

*C. nigro-lineatæ* affiniissima, at differt vittâ laterali nigrâ latiori. Saturate testaceo-rufa, antennarum articulis 5—11 piccis, elytris vittâ laterali interstitiâ 6—8 tegentiâ æneo-nigrâ.

Long.  $4\frac{1}{2}$  lin.

Hiogo; Yokohama; on foliage, like all the other species of the genus. Also Hong Kong, China.

Clayey-red, shining. The greenish-black vitta of the elytra covers the 6th to the 8th interstices in the middle of its course; but near the base it extends also over the 5th, and at the apex it curves a little, leaving the 8th, and extending over the 5th to the 2nd; the surface of the elytra is uneven, causing the striæ to be more deeply sunk in some parts than in others; the striæ are finely punctulate, and the interstices sprinkled with distinct punctures. The head is punctulated, especially in the long frontal furrows. The thorax is not quite so broad as the head, with narrow explanated margins, angulated before the middle, and slightly sinuated, but not narrowed, behind to the obtuse hind angles, which are rendered more obtuse by the obliquely truncated base immediately contiguous; the surface has numerous scattered punctures, which are denser on the anterior border.

The ligula, as described by Chaudoir in instituting the genus *Crossoglossa* (Ann. Ent. Soc. Belg. xv. 180), has numerous setæ. The lobes of the mentum are very widely rounded on the sides, and advanced at the apex, so that the epilobium seems to end on their inner edge.

*C. monostigma*, n. sp.

Gracilior, testaceo-rufa, elytris maculâ ovatâ suturali pone medium nigrâ.

Long.  $3\frac{1}{2}$  lin.

Nagasaki; Hiogo. Many examples.

Apparently allied to *C. fasciata* (Chaud.) from the Moluccas. Pale testaceous-red, shining; antennæ concolorous. The thorax is similar to that of *C. latecincta*, i. e. not distinctly transverse; it is about as broad as the head, with moderately narrow explanated margins, very slightly angulated just before the middle, thence sinuated to the nearly rectangular and slightly produced hind angles; the surface has a few scattered punctures. The elytra are about twice the width of the thorax, oblong-ovate, strongly punctulate-striate, the 3rd and 4th striae sunk in longitudinal depressions; the interstices finely and sparsely punctulated, the 3rd with five large punctures. The ovate black spot is sometimes prolonged in a point along the suture towards the base.

*C. cavipennis*, n. sp.

Latior, melleo-flava nitida, antennarum articulis 5—11 nigris; thorace mox ab margine antico dilatato-rotundato, late explanato; elytris fortiter punctulato-striatis, disco utrinque foveâ magnâ, ibique interstitio 3<sup>ti</sup>o punctigero.

Long.  $4\frac{1}{2}$ —5 lin.

Hiogo.

Testaceous tawny-yellow in well-preserved examples. The head is rather coarsely, but sparsely, punctured, and bears a V-shaped depression in the middle of the forehead. The thorax is strongly transverse; dilated and broadly rounded immediately from the anterior angles, and narrowed again behind, with little sinuation, to the obtuse but distinct hind angles; the lateral margins are broadly explanated, and the fore and hind borders rather thickly punctured. The elytra are oblong-ovate, obtusely and broadly truncated behind; the striae are well impressed and punctulate, and the interstices somewhat plentifully sprinkled with punctures; the 3rd, 5th and 7th interstices are much con-

tracted in the middle, owing to a depression in the side, and a much longer one on the disk ; a large puncture on the 3rd interstice is a conspicuous object in the discoidal depression, and there is a second one nearer the apex.

Apparently allied to *C. testacea* (Chaud.), from Dacca in Bengal.

*C. læsipennis*, n. sp.

Præcedenti major, elytrorum striis vix vel haud impressis. Melleo-flava vel testacea-rufa, nitida ; antennarum articulis 5—11 nigris ; thorace antice valde dilatato-rotundato ; elytris subtiliter striato-punctulatis, disco utrinque impressione profundâ transversâ flexuosâ.

Long.  $5\frac{1}{2}$ —6 lin.

Nagasaki.

Head same as in *C. cavipennis*. Thorax very similar ; strongly transverse, dilatate-rotundate anteriorly. Hind angles rather more obtuse, and base truncated on each side more obliquely. Elytra of greater amplitude ; striæ not impressed, consisting of rows of extremely fine punctures ; interstices finely and sparsely punctulate ; the discoidal depression has quite a different form from that of *C. cavipennis* ; instead of being a broad pit, it consists of a tortuous, irregular transverse furrow. The two large punctures of the 3rd interstice are in the same position as in *C. cavipennis*.

*Calleida lepida*, Redtenbacher, Reise d. Novara,  
Coleop. p. 6.

Nagasaki ; Hiogo ; Tango ; Yokohama. Also Hong Kong.

*C. onoha*, n. sp.

*C. picco-rufa*, pedibus, thoracis margine, antennarumque basi dilutioribus, capite castaneo-rufo ; elytris læte viridianeis, apice auratis, fortiter punctulato-striatis.

Long. 4 lin.

Hiogo.

The head is of a glossy chestnut-red, and obliquely narrowed behind the eyes as in *C. lepida*. The thorax is broader than the head, and rather strongly cordate ; the sides are almost semicircularly rounded from the neck, and sinuate-angustate after the middle to the obtuse, and not at all produced, hind angle ; the base is arcuated ; the lateral margins not very widely explanated, and the surface strigose ; except the pale margins it is of a glossy pitchy, or dark castaneous colour. The elytra are elongate, as in

*C. lepida*, and striated almost as deeply; the colour is brilliant metallic-green, golden towards the apex, and rather piceous along the suture; the interstices have a few distinct punctures.

Subfam. GALERUCIDINÆ.

*Lebidia octoguttata*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 323; id. Beitr. p. 20, t. 1, f. 11.

Nagasaki; Hiogo; Yokohama. Abundant, on wooded hills, by beating underwood.

*L. bioculata*, Morawitz, Beitr. p. 29, t. 1, f. 12.

On Maiyasan, near Hiogo; three examples.

All three specimens differ from the one Morawitz described in having a black spot in the centre of the large round yellow spot on each elytron, rendering still more appropriate the specific name. As they agree in all other respects, I do not venture to consider the difference as more than an accidental one.

Subfam. LEBIINÆ.

*Dictya cribricollis*, Morawitz, Bull. Ac. St. Petersb. v. 1863, p. 245; Chaudoir, Monogr. des Lebiides, p. 14.

Common throughout Japan; beaten from bushes. Also in Eastern Siberia, on the Amur.

*Lebia Japonica*, Chaudoir, Monogr. des Lebiides, p. 115.

Nagasaki; Hiogo. Abundant, in damp woods, on trees.

*L. fusca*, Morawitz, Beitr. p. 26.

Hakodadi.

Mr. Lewis did not meet with this species. It is allied to *Japonica*,  $3\frac{1}{2}$  lines long, and entirely dark brown above, except the sides of the thorax and the epipleura of the elytra.

*L. Idæ*, n. sp.

*L. Japonicæ* proxime affinis at differt colore. Rufotestacea, capite postice, thoracis disco, elytrisq̃ue nigropiceis, his marginibus extremis maculâq̃ue humerali virguliformi flavo-testaceis.

Long.  $3\frac{1}{2}$  lin.

Hiogo; Satsuma; Nagasaki.

It is a larger insect than *L. Japonica*. The head is



broader, and strigose and punctulate. The thorax is much broader, strongly transverse and broadly rotundate-dilated from the anterior angles; it is scarcely narrowed, and slightly sinuated, towards the basal angles, which are a little prominent; the surface is thickly and irregularly rugulose. The elytra are broad, distinctly dilated behind, and very deeply striated with convex interstices; in colour they are very dark castaneous, nearly black, with the extreme margins and an inverted comma-like spot, not touching the base, and spread over the 5th to 7th interstices in its basal part, and over the 3rd to 7th at its termination on the anterior disk of the elytron.

*L. sandaligera*, n. sp.

*L. Japonicæ* formâ simillima. Castaneo-rufa, scapo, femoribus, tibiis nigris, clytris nigro-castaneis, convexis fortiter striatis.

Long.  $2\frac{3}{4}$  lin.

Yokohama; one example.

Very similar in size and form to *L. Japonica*. The head is smooth and impressed in the middle of the forehead. The thorax is very similar in outline and proportions; moderately dilatate-rotundate from the anterior angles; but it is more rectilinearly narrowed behind, and the hind angles do not project in the slightest degree; the explanated lateral margins are rather narrow, and the disk is very minutely and faintly coriaceous. The coloration is very peculiar, especially the black femora and tibiæ, with tawny-reddish coloured tarsi.

*L. bifenestrata*, Morawitz, Bull. Ac. St. Petersb. v.  
1863, p. 245.

Var. *lucescens*, elytris fascia apicali flava.

Yokohama; Nagasaki; Iiogo; Usuri and Bureja, R. Amur.

Also closely allied to *L. Japonica*, but only half the size, and with a shorter and broader thorax. The elytra are dark brown, with a large pale discoidal spot. Only one of Mr. Lewis's specimens agrees in colour with Morawitz's description; the rest have a broadish pale apical fascia, and the discoidal spot prolonged anteriorly towards the middle of the base.

*L. comitata*, n. sp.

*L. Japonicæ* affinis, flavo-testacea; elytris profunde stri-

atis, vittâ suturali (apice abbreviatâ) apud medium constrictâ, maculâque utrinque postico-discoidali, nigris.

Long.  $2\frac{1}{2}$  lin.

Nagasaki ; Yokohama.

Elytra spotted similarly to *L. cyathigera*, but the species belongs to the same group as *L. Japonica*, having deeply striated or sulcated elytra, and strongly bilobed 4th tarsal joints. The head and thorax are somewhat redder than the rest of the body and limbs, and are very finely alutaceous and sub-opake. The thorax is rather short and strongly transverse, with broad explanated margins, broadly rounded from the anterior angles and scarcely narrowed behind to the rather obtuse, but somewhat prominent, hind angles. The dark markings of the elytra consist properly of an elongate-ovate spot over the suture, about the middle, which is connected anteriorly with an ill-defined triangular one over the scutellum more piceous or reddish in colour, and of a rounded discoidal spot on each elytron behind the middle.

*L. crux-minor*, L. et auctor.

Nagasaki ; Hiogo ; many examples.

No difference is perceptible between Japanese examples and those of Europe, except in the colour of the legs ; the hind trochanters, the apex of all the femora, the tibiæ and the tarsi being black. It approaches nearest, therefore, the S. European var. *nigripes*. I have specimens from East Siberia, some coloured as in the type, and others in which the apex of the femora and the tarsi are black.

Subfam. PENTAGONICINÆ.\*

*Pentagonica ruficollis*, Schmidt-Goebel, Faun. Col. Birm. p. 48.

Nagasaki ; on foliage.

Two examples, agreeing exactly with the description, except their larger size,  $2\frac{3}{4}$  lin., Schmidt-Goebel giving  $2\frac{1}{4}$  lin., but he had only a single specimen to judge from.

*P. nigripennis*, n. sp.

Nigra ; elytris nitidis fortiter punctato-striatis, margine deflexo fusco ; thorace testaceo-rufo, nitido ; antennis piceis ; pedibus flavo-testaceis, fusco-nebulosis.

---

\* *Scopodes* (Erichs.) probably belongs to this subfamily.

Long.  $2\frac{1}{6}$  lin.

Nagasaki; three examples.

Similar in form to *P. ruficollis*, but elytra more convex. The head is subopake; labrum and palpi piceous; antennæ pitchy-black, with the extreme bases of the joints pallid testaceous. The thorax forms a broader or more truncated peduncle at the base than in *P. ruficollis*. The elytra are of a deep shining black, the deflexed margins (epipleura) only tawny-brown, except in some examples this colour extends to the upper edges; the striæ are finely impressed, much more deeply so towards the apex, and are strongly punctured; the 3rd interstice does not show the two punctures which are so conspicuous (especially the one near the base) in *P. ruficollis*.

*P. subcordicollis*, n. sp.

Nigro-picea, antennis (scapo fusco-piceo excepto), palpis et pedibus flavo-testaceis; thorace minus transverso, subcordato sed angulis lateralibus distinctis, pedunculo latiori, truncato; elytris subtilissime punctatis, margine exteriori à scutello usque ad suturæ apicem anguste flavo-testaceo, suprâ fortiter punctato-striatis, striis apice minus impressis.

Long.  $2\frac{1}{8}$  lin.

Nagasaki; one example.

The thorax is less transverse, or narrower in proportion to the length, than in other Asiatic species; it is, however, of the same pentagonal form, except that the base forms a somewhat broader peduncle, obtusely truncated; its surface is convex and very glossy, pitchy-black, a little clearer on its margins. The head also is rather narrower and the eyes less prominent; and the antennæ have conspicuously thicker joints. The elytra have very strongly punctured striæ, but they become much fainter towards the apex.

To the four names (*Rhombodera*, *Pentagonica*, *Didetus*, *Elliotia*) which this well-marked genus had received, Mr. Wollaston has recently added a fifth, *Xenothorax*, in his "Coleoptera Hesperidum," founded on a species, *X. hexagonus*, from the Cape Verde Islands. This species is distinct from all others (9 in number) which I have been able to examine, but it offers not the slightest ground for generic separation. The basal peduncle of the thorax is much broader and more truncated than in *P. ruficollis*, but every species differs a little in the form of this part. The name *Rhombodera* (Reiche, 1842), is prior to *Pentagonica* (Schmidt-Goebel, 1846), but it was pre-occupied by Burmeister for a genus of *Orthoptera* in 1839.

## Subfam. COPTODERINÆ.

## AMPHIMENES, nov. gen.

Gen. *Stenognathus* formâ similis. Caput ovatum; oculis vix prominulis. Labrum elongatum antice angustatum, apice leviter angustatum. Mentum medio dentatum, lobis triangularibus, acutis. Ligula porrecta, angusta, antice bisetosa; paraglossis eam vix superantibus, adnatis. Palpi graciles, truncati. Thorax quadratus, postice modice angustatus. Elytra oblonga, oblique sinuato-truncata, profunde striata. Pedes elongati; tarsi gracillimi, angusti, articulis 1, 2 et 5 valde elongati, subæquales; unguiculi graciles, multidentati.

In facies, and in the narrow shape of the head and sub-flattened eyes, this genus resembles *Stenognathus*, and other genera of *Thyreopterinae* (Chaud.), but the bisetose ligula removes it to the *Coptoderinae*, according to Baron Chaudoir's definition; and I cannot but think that it proves the distinction drawn by this eminent Entomologist between the two groups to be highly artificial. The eyes are not so small and flat as in *Miscelus*, neither are they furnished with a thick orbit behind, the head narrowing very obliquely from the eye to the neck.

*Amphimenes piccolus*, n. sp.

Vix convexus, saturate fusco-piceus, partibus oris, antennis, thoracis et elytrorum marginibus angustis, pedibusque testaceo-fulvis; capite thoraceque alutaceis sericeis, hoc quadrato, antice utrinque modice rotundato postice parum angustato, angulis posticis obtusis, subrotundatis, margine laterali explanato et reflexo, pallido; elytris profunde striatis, interstitiis convexis subtilissime rugulosis sed nitidis, 3<sup>io</sup> bipunctato.

Long.  $2\frac{1}{4}$  lin. ♂ ♀.

Nagasaki; under bark.

The colour is dark pitchy-brown, rather glossy on the elytra, but sericeous subopaque on the head and thorax; the explanated margins of the thorax and the elytra, like the antennæ, legs and parts of the mouth, are pale tawny-yellowish. The elytra differ somewhat in outline from those of *Stenognathus*, *Sinurus*, &c. in being narrower, especially at the base, where they are not much broader than the widest part of the thorax; the shoulders are obliquely rounded. The interstice between the 8th and 9th striae, anteriorly, is broken up by large irregular punctures.